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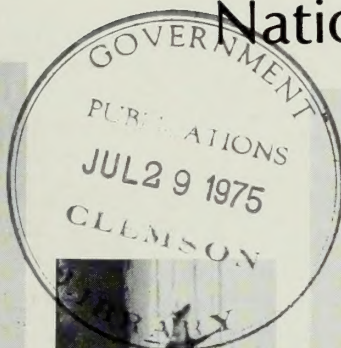


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PUBLICATION

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Mt. McKinley National Park Additions



DEPARTMENT OF THE INTERIOR

Final
Environmental Statement

Proposed
MT. MCKINLEY
NATIONAL PARK ADDITIONS
Alaska

Prepared by
Alaska Planning Group
U.S. Department of the Interior



October, 1974

Royston C. Hughes

Royston C. Hughes
Assistant Secretary of the Interior
Chairman, Alaska Task Force



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SUMMARY

() Draft (X) Final Environmental Statement

Department of the Interior, National Park Service

1. *Type of Action:* Legislative and Administrative

2. *Brief Description of Action:*

The Secretary, Department of the Interior, proposes that Congress legislatively provide for land and water additions to Mount McKinley National Park in central Alaska under provisions of the Alaska Native Claims Settlement Act. This proposal will increase the size of Mount McKinley National Park from 1,939,493 acres to 5,150,000 acres. The Park Service also proposes a conceptual master plan to guide the administration of this enlarged park. The Secretary further proposes a cooperative planning and management zone to the south and east of the park.

3. *Summary of Environmental Impact:*

The proposal may affect: (A) Fulfillment of the intent of the original act establishing Mount McKinley National Park. (B) The long-term regional and State economy through increased visitation. (C) Preservation of an entire, unhunted, naturally regulated large mammal subarctic ecosystem, including wolves, Dall sheep, caribou, moose, and grizzly bear. (D) Preservation of the scenic and geologic features of the Mount McKinley portion of the Alaska Range, including the glacial systems and the Cathedral Spires. (E) The nation's culture by setting aside an ecologically manageable valuable and representative portion of the earth's surface. (F) Natural resource extraction, including mining, hunting, trapping, and lumbering. (G) Possible commercial or private developments on lands and waters to be added. (H) Freedom of choice for possible ground transportation or developments. (I) Existing private entry patents, claims, leases or applications. (J) Commitment of parcels of land for visitor use and administrative developments.

4. *Alternatives Considered:*

(A) No action. (B) Additions of some size other than that proposed. (C) Public land, but with a different management philosophy, including the existing park. (D) Private land. (E) A different master plan.

5. *Comments Have Been Requested From the Following:*

See attached page.

6. *Date Made Available to CEQ and the Public:*

Draft Statement: December 18, 1973

Final Statement: November 1974

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AGENCIES AND ORGANIZATIONS THIS ENVIRONMENTAL STATEMENT
SENT TO FOR REVIEW AND COMMENT

FEDERAL:

- Department of the Interior
 - Fish and Wildlife Service
 - Bureau of Mines
 - Bureau of Indian Affairs
 - Bureau of Land Management
 - Geological Survey
 - Alaska Power Administration
 - Bureau of Outdoor Recreation

- Department of Transportation
 - Federal Aviation Administration
 - The Alaska Railroad
 - Federal Highway Administration

- Department of Agriculture
 - U. S. Forest Service
 - Soil Conservation Service

- Department of Defense
 - Alaska Command
 - Corps of Engineers

- Advisory Council of Historic Preservation
- Environmental Protection Agency

STATE:

- Governor (State Clearing House)
- State Liaison Officer, Historic Preservation

ORGANIZATIONS:

- Mountaineering Club of Alaska
- Sierra Club
- The Wilderness Society
- The National Audubon Society
- National Wildlife Federation
- Friends of the Earth
- National Parks and Conservation Association
- Conservation Foundation
- Alaska Professional Hunters Association
- Alaska Oil and Gas Association
- Alaska Sportsmen's Council
- Alaska Miners Association

LOCAL GOVERNMENT AGENCIES:

Matanuska-Susitna Borough
Cantwell Village Council
City of McGrath
Nikolai Village Council
City of Nenana
City of Talkeetna
Telida Village Council
Medfra Village Council

NATIVE ORGANIZATIONS:

Cook Inlet Native Regional Corporation
Doyon, Inc.
Ahtna Corporation
Cantwell Native Village Corporation
McGrath Native Village Corporation
Nikolai Native Village Corporation
Telida Native Village Corporation
Medfra Native Village Corporation
Nenana Native Village Corporation
Alaska Federation of Natives
Alaska Native Foundation



The Great Gorge of the Ruth Glacier is characteristic of the high mountain wilderness proposed for addition to the south side of

Mount McKinley National Park. Only the crest of Mount McKinley [on the skyline] lies within the boundaries of the existing park.

I. DESCRIPTION OF THE PROPOSAL

The Secretary, Department of the Interior, proposes: (1) Legislative action to add approximately 3,210,000 acres to the existing Mount McKinley National Park, to close the existing park and the proposed additions to mining, subject to valid existing rights, and to establish a cooperative planning and management zone adjacent to the enlarged park; and (2) administrative action to adopt a conceptual master plan for management of the park so enlarged.

A. LEGISLATIVE PROPOSAL

The Congressional intent in establishing Mount McKinley National Park is stated in section 5 of the act of February 26, 1917 (39 Stat. 938). The park was set aside "...for the freest use of the said park for recreation purposes by the public and for the preservation of animals, birds, and fish and for preservation of the natural curiosities and scenic beauties thereof." The purposes of Mount McKinley Park are:

- (1) To preserve the natural ecological relationships essential for perpetuation of viable populations of indigenous wildlife.
- (2) To preserve unspoiled the grandeur and setting of the mountain massif and associated features and processes of the Alaska Range.
- (3) To interpret the varied ecological, geological, historical, and scenic features and processes of the park.
- (4) To provide for maximum appropriate public use and enjoyment of the esthetic and ecological resources of the park consistent with the preservation of primary resource values.
- (5) To provide opportunities for nonmanipulative baseline research on essentially undisturbed subarctic ecosystems.

Two additions to the park, one north of the crest of the Alaska Range, and one to the south, are proposed to accomplish the purpose and the original intent of Congress (The Proposal map). Table 1 shows the land status of these proposed additions.

TABLE 1
LAND STATUS OF PROPOSED ADDITIONS
(IN MILLIONS OF ACRES)

	d-2	d-1	Total
North Addition	1.1	0.5	1.6
South Addition	1.6	--	1.6
Total Additions	2.7	0.5	3.2

Research accomplished since the establishment of the original park (Haber, 1972; Murie, 1942-1972) indicates that the ranges of the primary large mammal species (i.e. wolf, moose, Dall sheep, caribou, wolverine, and grizzly bear) extend beyond the existing boundary to the north and the west. The 1.6 million acres proposed for addition to the north side of the park are primarily for the purpose of providing sufficient range within ecologically manageable boundaries to ensure perpetuation of the indigenous large mammal community.

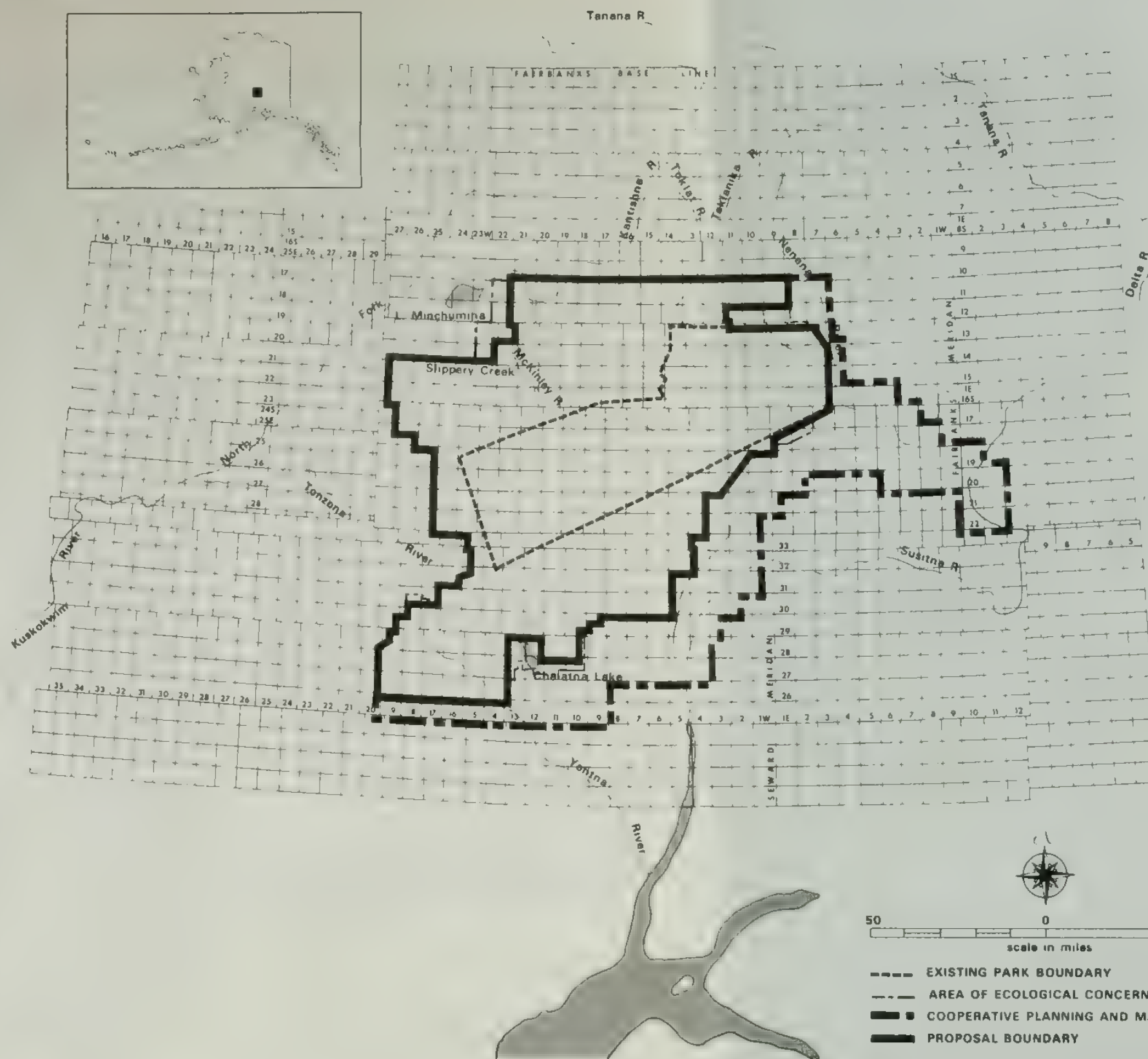
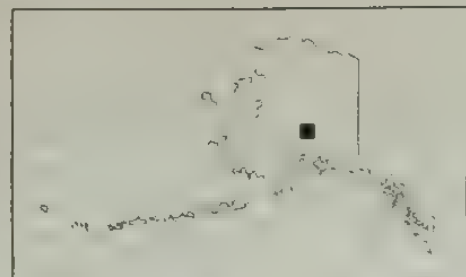
The southern addition, totaling 1.6 million acres, is proposed primarily to provide National Park Service protection to that portion of the Alaska Range that includes Mount McKinley and associated peaks, the granitic Cathedral Spires and their associated glacial systems. The southern addition also provides a visitor access to the park that avoids disturbance of the critical wildlife areas to the north through reducing pressure created there by increased visitation, present and future.

The overriding purpose of requesting extensive areas of habitat in this park proposal is to assure protection of habitat, as well as those animals and

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THE PROPOSAL



plants which occupy it during all or part of their life cycle. The object is to enclose tracts extensive enough to provide sufficient areas and sufficient habitat diversity to reasonably assure long-term existence of unmodified (insofar as possible) portions of ecosystems. These should be sizeable enough to allow long-term survival for every species present in the ecosystem, and to allow significant numbers of most of the large mammals using the system to live out their lives with minimal direct or indirect disturbance by man.

All major known potential mineral production areas have been excluded from the proposed additions except Kantishna, which has had mineral production in the past. All parklands will be withdrawn from all forms of appropriation under the public land laws, including the mining laws. Valid existing claims will be recognized.

Since uncertainty exists regarding what is hunting for sport and what is hunting for subsistence an in-depth study of subsistence lifestyles and resource uses will be carried out. Resource harvest activities by local residents will continue under existing State and Federal laws pending results of this study. If it becomes necessary to restrict harvest because resource viability is threatened before study results are available, restrictions will be initiated after consultation with State agencies, affected communities and individuals.

In the event conflicts occur among uses or in cases where a resource cannot support all demands for use, subsistence needs will be given priority over other demands on natural resources. Recreational and visitor use facilities and programs will be planned and zoned as to location and season of use so that they will have minimal conflict with subsistence activities and needs. It is recognized that sustained biological productivity of all subsistence-related resources is the pivotal factor in maintaining the capability for these uses. It is the intent of this proposal that natural

productivity be maintained, recognizing that natural fluctuations occur, so that subsistence uses will be carried out under the same biological patterns, and at the same levels as in the past.

Sport hunting of all kinds will be prohibited. Existing established subsistence uses will be allowed to continue.

Proposed legislation also includes provisions that the United States be granted exclusive jurisdiction over lands within the extensions to the park and that the park be studied for possible additions to the National Wilderness Preservation System in a manner similar to that prescribed by the Wilderness Act of 1964, and the study report be made to Congress within 3 years of establishment of the extensions. (See Appendix E for further information on wilderness designation at Mount McKinley.)

Establishment of a Cooperative Planning and Management Zone to the south and east of the enlarged park (Proposal map), comprising the threshold area to Mount McKinley National Park, is also proposed. This zone would be established within the context of overall State land use planning efforts and would involve the Bureau of Land Management, the State of Alaska, its local political subdivisions, and the Native corporations and villages.

The objectives of the creation of this zone would be to:

- (1) Foster continuing involvement of the National Park Service in regional planning efforts adjacent to the park particularly with respect to technical assistance.

- (2) Assure orderly and responsive land and resource use.

- (3) Retain the existing character of the foreground



Viewed from the south, the massive grandeur of Mount McKinley is enhanced by varied foregrounds of forest, mountain valleys, glaciers, and rugged foothills.

scene to the enlarged park, including scenic and recreation resources.

- (4) Recognize and protect critical wildlife habitats.
- (5) Encourage and participate in the creation of a stable, multifactored regional economic base.
- (6) Encourage responsive use and development of valuable renewable and nonrenewable resources, including mining and agriculture.
- (7) Maintain and enhance the variety of recreational opportunities available, including sport hunting.
- (8) Maintain the air and water quality of the region.
- (9) Provide for transportation and development needs including administrative and visitor use facilities and overnight accommodations for visitors to the park and region.

Appropriate land use controls to assure the proper protection, management, and interpretation of the zone will be prepared by the participating agencies and, within three years following establishment of the zone, the Secretary of the Interior shall report to Congress as to their effectiveness.

The zone is comprised of d-1; State selection patented, tentatively approved, and pending; and Native village withdrawal lands.

In addition, the National Park Service has identified five areas of ecological concern adjacent to the proposed park additions. The legislative proposal provides that any lands within these areas which are not selected by the State or Natives may eventually be included with the park.

B. ADMINISTRATIVE PROPOSAL

Associated with the legislative proposal is a

suggested conceptual master plan for the operation of the park subsequent to its authorization by Congress. A conceptual master plan is not intended to be a definitive document explicating every detail of development and management of a park. Particularly in the case of a newly expanded park like Mount McKinley, it is necessary to delay the development of detailed plans for construction, transportation, or other matters until the completion of intensive investigations of the values to be preserved and the feasibility and advisability of alternative means of meeting the needs of management and the public, lest irreplaceable resources be threatened by hasty or ill-conceived projects. The conceptual master plan outlines the general management philosophy for the area for at least the next decade, identifies management problems and questions to be resolved, and establishes broad guidelines for future planning, management, and development to assure that the resources are fully protected while optimum public use is provided. Master plans are frequently reviewed and are updated as new data is obtained and as changing circumstances warrant.

In accordance with the master plan, Mount McKinley National Park will be managed as a natural unit of the National Park System.

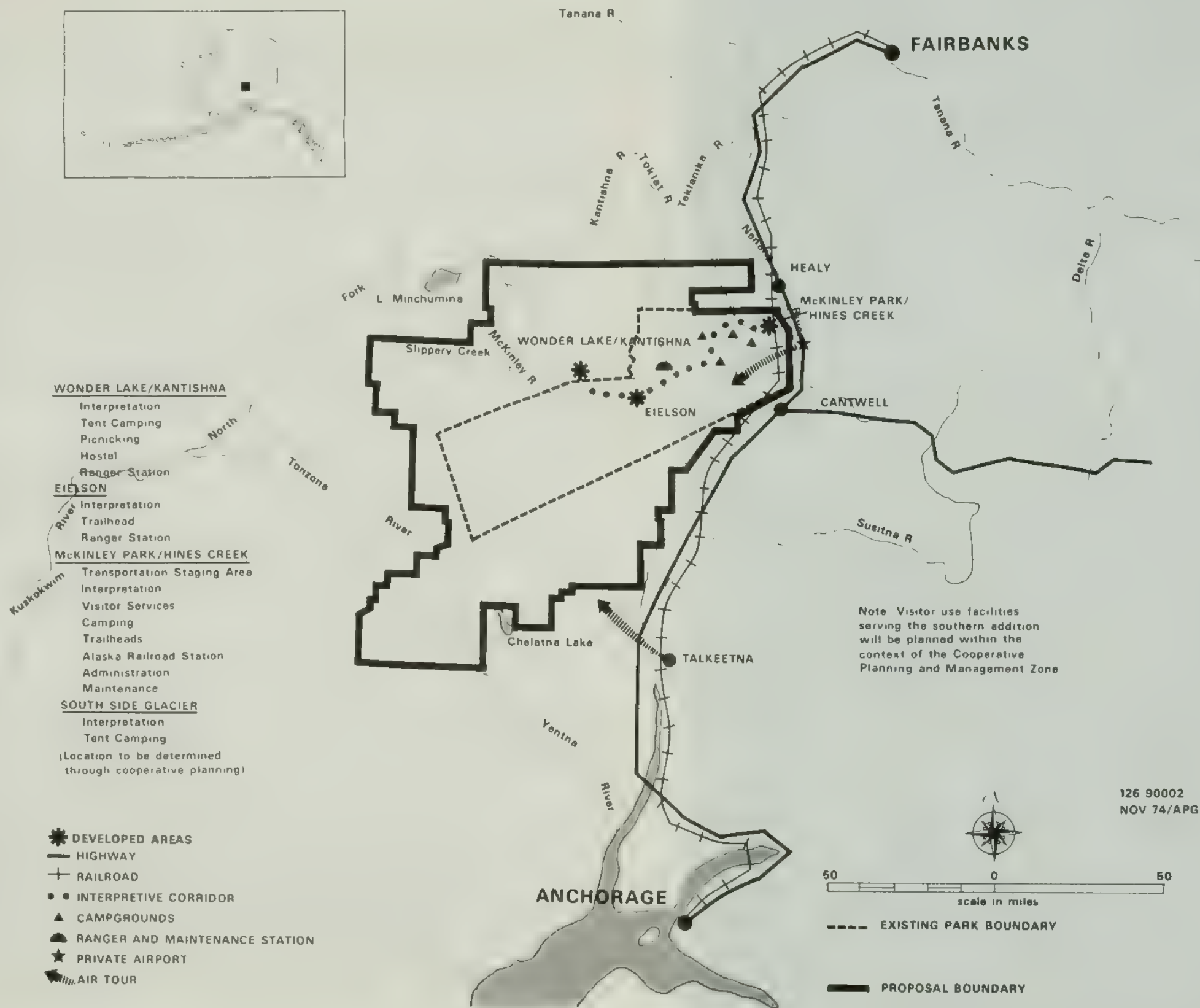
The proposals made within the plan include:

- (1) A management and planning concept which, while directing that the park be managed as a single ecologic unit, proposes to establish two management and use concepts for separate areas within the park: The portion of the park north of the Alaska Range crest plus an area south of the crest near the eastern end of the park is to be managed with major emphasis on preservation of the representative large mammal communities which they contain. The portion of the park south of the crest is to be managed primarily for preservation of the scenic and geologic features

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GENERAL DEVELOPMENT



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which occur there and for greater levels of visitor use and public recreation than allowable for the north side.

Cultural resources that qualify will be nominated to the National Register of Historic Places at the earliest opportunity, and professional surveys will be conducted after legislative authorization of the proposed additions to locate, identify, and evaluate all such resources meriting nomination. By virtue of their National Register listing, they will be accorded the procedural protection of Section 106 of the National Historic Preservation Act of 1966. Cultural resources worthy of preservation but not yet listed in the National Register are accorded the procedural protection of section 2(b) of Executive Order 11593 (May 13, 1971).

(2) A land classification plan based on the land classification system developed by the Outdoor Recreation Resource Review Commission, and adapted by the National Park Service. (Land Classification map)

(3) A development concept which provides for facilities to enhance visitor use and interpretation of the resources of the park. (General Development map)

In the north unit of the park this concept includes a visitor staging area and an administrative development in the McKinley Station-Hines Creek Area, an interpretive corridor utilizing a public transportation system, retention of an existing interpretive function at Eielson, conversion of the Wonder Lake campground to a picnic area, retention of the privately operated environmental education camp at Camp Denali and the North Face Lodge, an overnight accommodations facility, and development of interpretive facilities and a youth hostel at Kantishna.

In the south unit, no development is proposed at

this time. Future visitor use facilities, as noted in the Master Plan, will be planned in conjunction with the Cooperative Planning and Management Zone.

(4) An interpretive program is proposed to assist the visitor in fully understanding and appreciating the total resources of Mount McKinley National Park.

(5) A natural resources management study is proposed to determine the impact tolerances of the natural resources and the environment.

The managing agency will work with all concerned State agencies, communities and affected individuals in arriving at an equitable and workable management plan for subsistence resource uses in the proposed additions.

(6) A comprehensive biological and sociological research program is proposed to better understand the operation of unaltered, natural ecosystems in this particular subarctic environment and how best to accommodate visitor use in them.

(7) Alternative transportation system studies are proposed to examine impact-capacity visitor-use relationships.

(8) An employment policy which will provide for training and utilization of Native Alaskans in any suitable capacity in the management and maintenance of the proposed park.

(9) A vigorous program of identification, research, and interpretation of archeologic and historic sites is proposed. The proposal area includes several as yet imperfectly identified cultural (historic, archeological, architectural) resources thought to be worthy of preservation. The opportunity to conduct scientific research and to interpret to the public the meaning of those cultural values is of

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LAND CLASSIFICATION



value to the people of the United States--and of importance to the heritage of the peoples of the Mount McKinley area.

Any contemplated Federal action which might affect the integrity of Mount McKinley's cultural resources will involve consultation with the Alaska State Historic Preservation Officer and the Advisory Council on Historic Preservation.

Research on Mount McKinley's cultural resources will be by qualified investigators of recognized educational or scientific institutions in conformance with the procedures for permitting research under the Antiquities Act of 1906. Preservation and restoration techniques employed will be in accordance with professional standards for historic preservation. In addition, the sanctions of the Antiquities Act against unauthorized appropriation or destruction of cultural resources will be enforced by area management.

At the present time there are no properties now listed in the National Register that will be affected by the proposal.

C. AREAS OF ECOLOGICAL CONCERN

Areas of ecological concern are those lands and waters adjacent to but not proposed for inclusion in the park which contain resources that are part of the total ecosystem, and which if compromised, would endanger resources within the proposal.

The Secretary of the Interior may, if such lands and waters within the area of ecological concern are not selected to satisfy Native or State selection rights, submit a report to the Congress on his findings together with his recommendations as to whether such Federal lands should be added to the park. With respect to those lands within the area of ecological concern which are selected or

are already in other ownership, the Secretary will request Congressional authorization to enter into cooperative agreements with the landowners to assure that those lands and waters are managed in a manner which will insure that park resource values are fully protected. For those lands within areas of ecological concern which are in existing or proposed national forests and wildlife refuges, it is not intended that the Secretary study any such lands for possible addition to NPS units; rather, cooperative agreements will be requested.

Five areas of ecological concern relating to park resources have been identified. These are: (The Proposal map)

(1) Approximately 92,000 acres of State selections tentatively approved land west of Healy and adjacent to the northern boundary of the existing park. These lands are critical wolf and Dall sheep habitat, and wolf and sheep in this area range in and out of the existing park. The National Park Service proposes cooperative planning in this area compatible with park purposes to assure the continued health of this portion of the Mount McKinley large mammal community.

(2) Approximately 126,000 acres of Native village withdrawal land east of Lake Minchumina that constitute a moose concentration area in which calving is thought to occur.

(3) Approximately 4,000 acres of State selections pending land in the uppermost reaches of Mystic Pass relating to watershed protection in the Yentna River drainage.

(4) Approximately 12,000 acres of Native village withdrawal and State selections pending near Cantwell adjacent to the existing park which relates to watershed protection within the park. The village of Cantwell and the Ahtna Corporation have expressed their desire that park lands about their lands following Native selection.

(5) Approximately 112,000 acres of State selections pending surrounding Lake Chelatna. Parts of this land are excellent moose and grizzly bear range. Lake Chelatna is the key access point to that portion of the Alaska Range. Its beauty and its location are also the attributes that could lead to its overuse. Management of these lands must recognize these characteristics and their vital relationship to the proposed expansion of the park.

D. INTERRELATIONSHIPS WITH OTHER PROJECTS AND AGENCIES

Section 17 of the Alaska Native Claims Settlement Act (ANCSA) established the Joint Federal-State Land Use Planning Commission for Alaska. Congress authorized the Commission to "undertake a process of land-use planning, including the identification of and the making of recommendations concerning areas planned and best suited for permanent reservation in Federal ownership as parks, game refuges, and other public uses...". The recommendations of the Commission were submitted to the Secretary of the Interior in August 1973 and were carefully considered in developing this and other proposals.

Although the Commission's recommendations were considered during the planning process, not all recommendations were followed because of their incompatibility with agency mandate. Throughout the planning process the NPS utilized resource data gathered by the Commission and often consulted with its resource planning team in the evaluation of such data.

There are a number of projects and proposals in the immediate vicinity that relate to the National Park Service proposals. Cooperation and coordination with the several agencies involved is imperative.

The Bureau of Land Management will manage public lands to the north of Mount McKinley National Park. Cooperation between the National Park Service and the Bureau of Land Management will be essential, especially in the fields of wildlife habitat management, land use, public use, and fire control.

Since the Alaska Departments of Fish and Game and Public Safety are responsible for game management and game law enforcement on adjacent lands, cooperation with them in these fields will be sought.

The United States Forest Service is proposing the Yukon and Kuskokwim National Forests to the north and west of the Mount McKinley proposal. Cooperative efforts, similar to those with the BLM, will be essential.

Air navigation aids will be planned in coordination with the FAA and will be installed and used in conformity with the standards of that agency. Authority to control the use of airspace and to regulate both civil and military operations therein lies with the Secretary of Transportation.

Denali State Park lies adjacent to and south of the proposal area, and within the Cooperative Planning and Management Zone. Cooperation will be sought to preserve the scenic and wildlife qualities of both parks and to provide for visitor use.

The Matanuska-Susitna Borough lies adjacent to and within the proposal areas. Cooperation, accomplished primarily through the functioning of the Cooperative Planning and Management Zone, will be essential to fulfill the needs of both the National Park Service and the Borough.

Cooperation in planning and management of the lands that will be selected by the village of Cantwell and the Ahtna Regional Corporation is

an integral part of the purpose of the Cooperative Planning and Management Zone. Since Cantwell is located at the junction of the Anchorage-Fairbanks and Denali highways, its role in providing necessary services to visitors to the region will be important.

Cooperation in regional planning will be sought with the newly-formed Fairbanks T.V.A. Development, Inc., Economic Development District, whose area includes a portion of this proposal.

Although the Cook Inlet Corporation regional boundary includes a portion of the proposal area it is unlikely that a great deal of interaction will be necessary as it relates to Mount McKinley since there are no village or corporation withdrawal lands adjacent to or within the proposal area. The National Park Service will continue to be sensitive to any issues that relate to Cook Inlet Corporation and consult with them should they become affected by any aspect to the operation of the park. A very high degree of cooperation will be necessary with several agencies of the government of the State of Alaska, primarily the Division of Highways, the Division of State Parks, the Department of Fish and Game, the Division of Lands, and the State Troopers. Most of this cooperation will occur within the context of the Cooperative Planning and Management Zone. Additional cooperative agreements with other agencies may be necessary.

As Alaska continues to develop, there will be a need for rights-of-way within corridors to adequately accommodate transportation and utility requirements. Studies to define these rights-of-way corridor needs are currently underway by the Interior Department but are not yet completed. It is possible that these transportation and utility corridor needs could impact the d-2 proposals. Applications for rights-of-way to facilitate the transportation of

energy resources have recently been received by the Federal Government which, if issued, also might impact on the d-2 proposals. Actions pursuant to these applications, whether for a specific right-of-way within a corridor or other action, would be subject to the requirements of NEPA.

The Alaska Railroad traverses both portions of the Cooperative Management and Planning Zone and the existing park, necessitating continued cooperation.

As described in detail in the following chapter several hydroelectric dams have been proposed on the Nenana, Chulitna and Susitna Rivers. Such proposals will be addressed in the context of the Cooperative Planning and Management Zone.

Senator Mike Gravel of Alaska has proposed a study to determine the feasibility and location of a recreational city south of the Alaska Range. This proposal also should be addressed in the context of the Cooperative Planning and Management Zone.

E. BACKGROUND

The Mount McKinley area is one of outstanding scenic beauty and geologic significance. It offers an opportunity to sustain an essentially complete and minimally disturbed subarctic ecosystem dominated by natural populations of large and small predators and their prey and encompassing a relatively high diversity and abundance of plant and animal species representative of Interior Alaska. Major wildlife species of the ecosystem include Dall sheep, caribou, moose, black and grizzly bear, lynx, fox, marten, wolverine, beaver and wolf. This ecosystem also includes representative examples of tundra and boreal forest vegetation, ponds, lakes, and streams.

These habitats occur in conjunction with a unique and spectacular combination of geologic features including major faults, active glaciers, and Mount McKinley itself, at 20,320 feet, the highest peak in North America. In addition to its height, Mount McKinley's gigantic mass, isolated from its neighbors, rises over 18,000 feet above the plains which surround it. The park, with its proposed additions, includes ancient sea beds, geologically young mountains, and a wide range of other geologic features.

Against the rugged scenic backdrop of the Alaska Range, the seemingly unending expanse of subarctic tundra and taiga provides an opportunity for visitors to observe an exceptional diversity of native wildlife. Mount McKinley National Park, one of the great natural attractions in the world, provides man with the opportunity to understand the natural forces which shaped this earth and the biological inter-relationships of which it is knit.

The combination of biologic, geologic, and climatic features and processes offers an opportunity for baseline research of virtually undisturbed subarctic systems from which man can derive a means of understanding and predicting the consequences of human actions on other areas in the North.

The existing Mount McKinley National Park provides an incomplete representation of plant and animal communities within this region, and does not include all of the geologic and scenic resources associated with the Mount McKinley massif. Nearly one-half of Mount McKinley and over 90 percent of its associated glacial systems are presently outside the park boundary. Continuing studies by Park Service personnel over many years have proposed extensions of the park to complete the ecosystems and include the associated features. The existing park does not represent adequately a number of habitats present in the region, and does not include sufficient for many of the

animal species present.

This proposal, which would mitigate habitat and other ecological inadequacies and would place important scenic, geologic and historic resources under a single administrative agency, is made in accordance with the Alaska Native Claims Settlement Act of 1971 (ANCSA), Public Law 92-203. ANCSA directed the Secretary of the Interior to withdraw from all forms of appropriation up to 80 million acres of public lands in Alaska for possible addition to or creation as units in the National Park, National Forest, National Wildlife Refuge, and National Wild and Scenic Rivers Systems. The Secretary made his recommendations to Congress on December 18, 1973, regarding areas he recommended for inclusion in the four systems. Congress from that time had five years in which to act on the various proposals.

In addition to the lands withdrawn for study as possible inclusions in one of the four systems, the Secretary has withdrawn lands for possible selection by the Native groups and the State of Alaska and lands for additional Federal study.

Following is a brief description of the various land classifications involving this proposal:

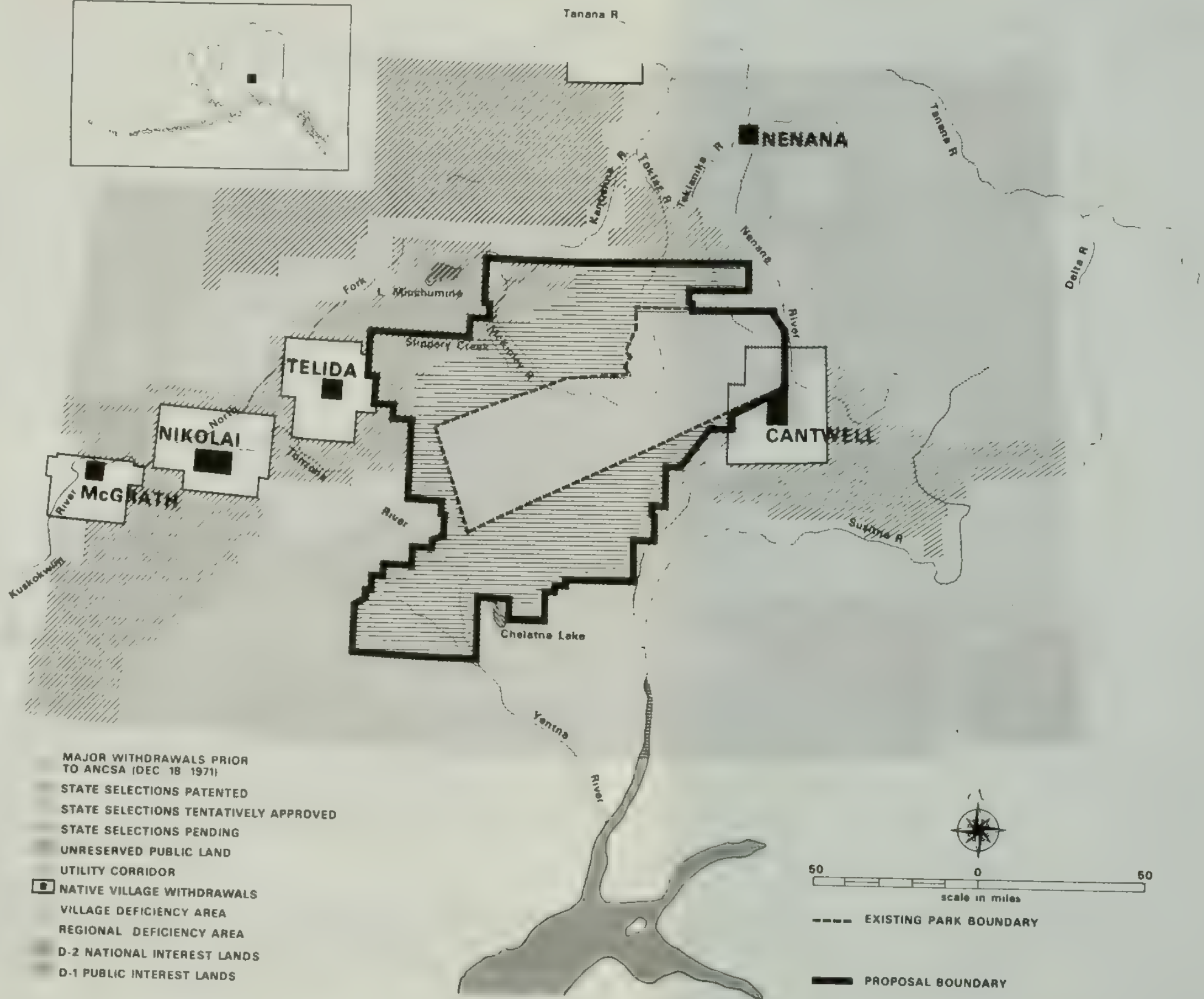
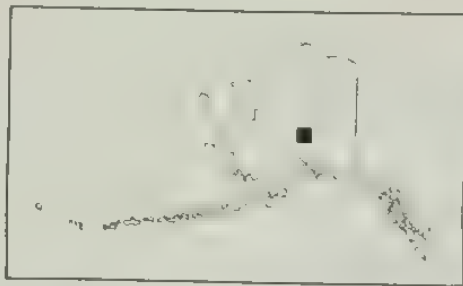
1. NATIONAL INTEREST LANDS (d-2)

National interest lands (d-2) are described in section 17(d)(2) of the ANCSA as lands withdrawn from all forms of appropriation under the public land laws, including the mining and mineral leasing laws, and from selection under the Alaska Statehood Act, and from selection by Native corporations. The Secretary of the Interior was directed to place up to 80 million acres in d-2 classification for possible inclusion into the four systems. The d-2 lands not included in the four systems and not reclassified as Native or State

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LAND STATUS



lands, will revert to d-1 status on December 18, 1973.

2. PUBLIC INTEREST LANDS (d-1)

Public interest lands (d-1) are lands classified in section 17(d)(1) of ANCSA as lands withdrawn from all forms of appropriation under the public land laws, including the mining (except for metalliferous minerals) and the mineral leasing laws to insure that the public interest in these lands is properly protected. These lands have been withdrawn for further study and possible reclassification. The Secretary has withdrawn approximately 43 million acres of d-1 lands. These lands, if not reclassified, could eventually become open to public entry and available for State application.

3. NATIVE VILLAGE WITHDRAWAL LANDS

Native village withdrawal lands are lands reserved for selection by village and regional corporations from lands withdrawn by the Secretary pursuant to section 11 of ANCSA. Under provisions of ANCSA, each village will receive the surface rights of all lands within the township in which the village is located, and of two to six additional townships depending upon the size of village population. Subsurface rights of village selected lands are reserved in ownership by the appropriate regional corporation (section 12(a) (1)) except for lands selected by villages within National Wildlife Refuges or on Naval Petroleum Reserve Number 4, in which case the regional corporation for that region may select the subsurface estate in an equal acreage from other lands withdrawn (subsection 11(a)) within the region. ANCSA directed the withdrawal of each township which is contiguous to, or corners on, the township that encloses the village, and the withdrawal of each township which is contiguous to, or corners on, any of these

lands. In general, this means that up to 25 townships have been withdrawn for each village.

4. REGIONAL DEFICIENCY LANDS

Regional deficiency lands are lands which may be selected by the regional corporation under section 11 of ANCSA if sufficient lands are not available for regional corporation selections within the Native village withdrawal areas. Selection of deficiency lands is to insure the full acreage entitlement of the Natives as directed in the act.

5. STATE SELECTIONS PATENTED LANDS

State selections patented lands are lands which were selected by the State of Alaska under the provisions of the Alaska Statehood Act. Ultimately the State is entitled to the selection of 103 million acres. Title to the patented lands has been fully transferred from the United States to the State of Alaska. In the proposal region these lands occur only in the Cooperative Planning and Management Zone.

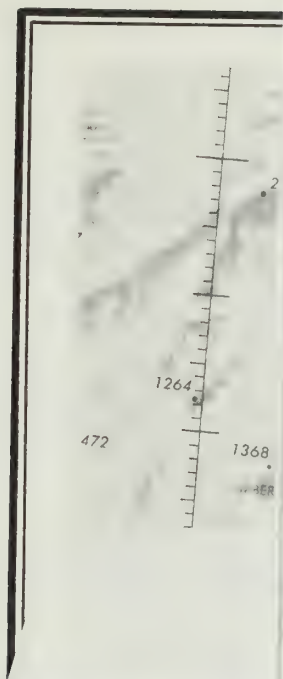
6. STATE SELECTIONS TENTATIVELY APPROVED LANDS

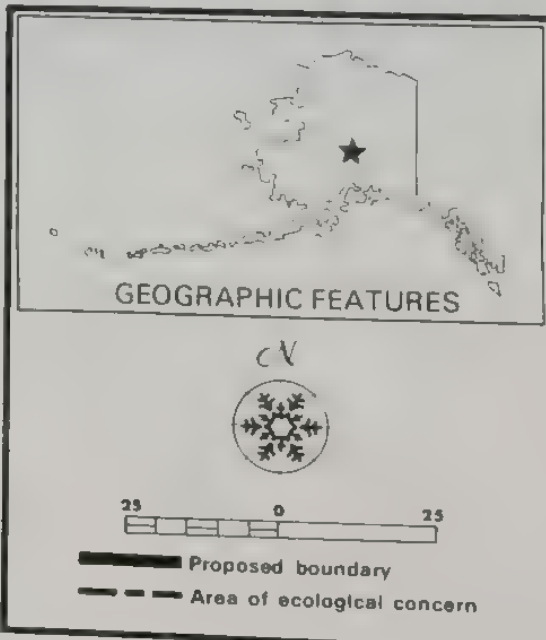
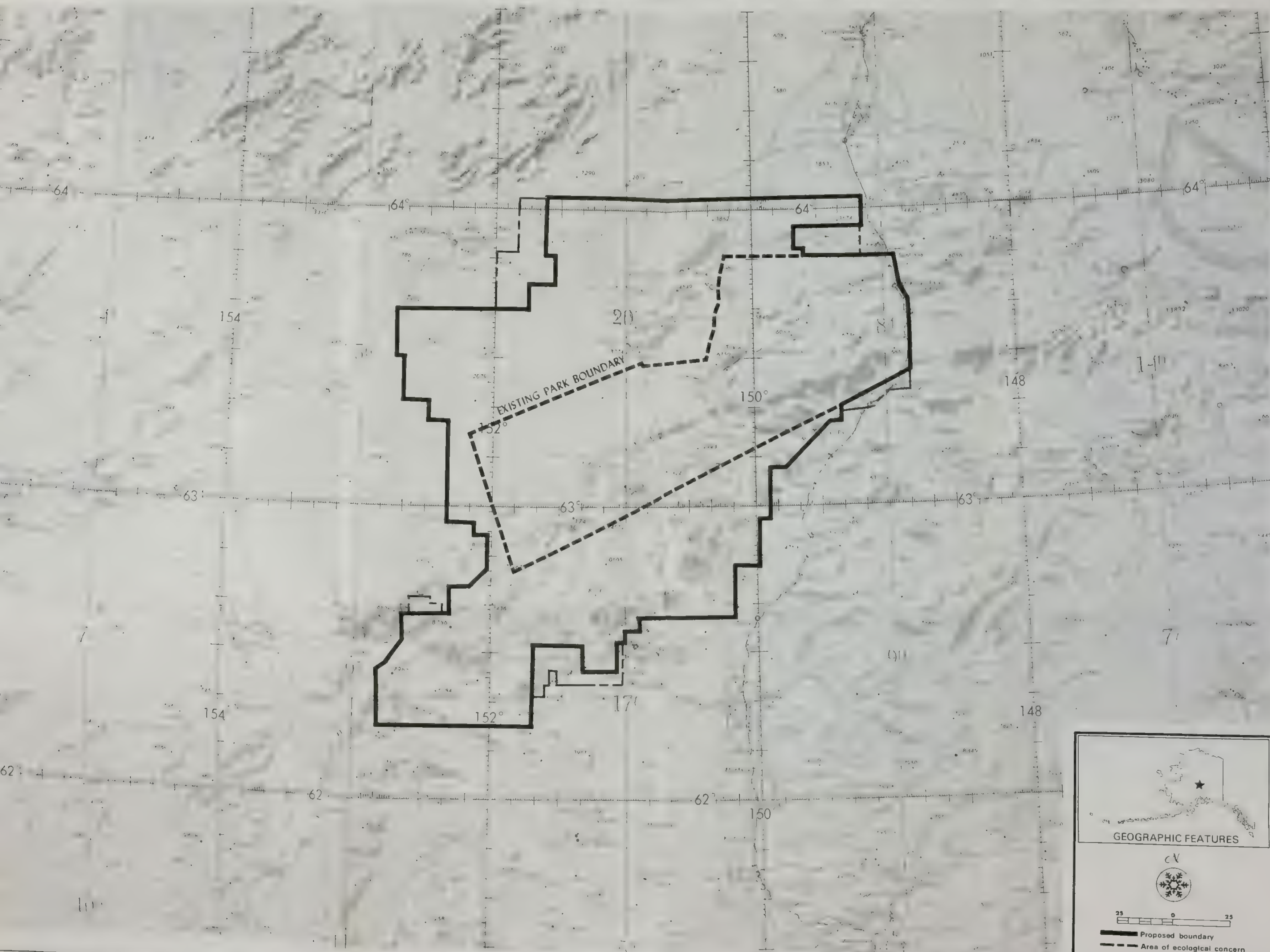
State selections tentatively approved lands are lands that have been selected under the provisions of the Alaska Statehood Act and for which title transfer has been tentatively approved but not formally completed. These lands occur in the proposed Cooperative Planning and Management Zone and in areas of ecologic concern.

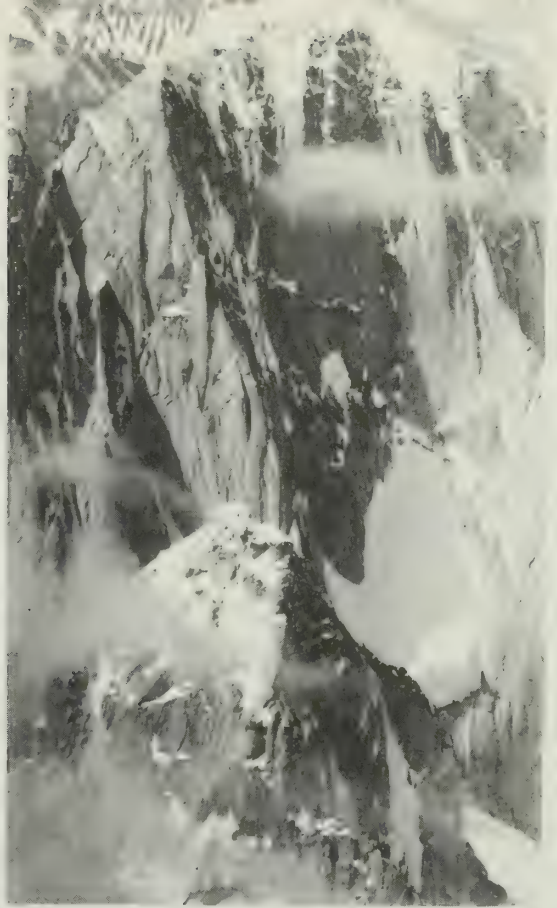
7. STATE SELECTIONS PENDING LANDS

State selections pending lands are those lands which have been identified by the State of Alaska

to complete their entitlement under provisions of the Statehood Act and ANCSA. No action regarding transfer of title of these lands has occurred. These lands occur in the proposed cooperative zone and in areas of ecologic concern.







Cathedral Spires, towering lifeless wilderness of granite and ice.

From the slopes of Mount McKinley many large glaciers sweep outward through canyons of their own design. This is the Yentna Glacier.





In the proposed northern addition to the park numerous scattered lakes are habitat for nesting waterfowl. Surrounding open black spruce taiga is critical range for the McKinley Park caribou herd.



The frozen scenic grandeur of Mt. McKinley, the tundra, and a band of caribou symbolize the significant resources of Mount McKinley National Park.

II. DESCRIPTION OF THE ENVIRONMENT

A. THE EXISTING ENVIRONMENT

Mount McKinley region is located in south-central Alaska in the central portion of the Alaska Range. The area is generally bounded by lines from a point about halfway between Healy and Nenana to Lake Minchumina to Medfra on the north; from Medfra to Rainy Pass (approximately 10 miles west of the Cathedral Spires) on the west, from Rainy Pass to Talkeetna on the south; and from Talkeetna to the Susitna River crossing on the Denali Highway, to Healy on the east and then to a point north of Healy. (The Region--Transportation map)

The existing Mount McKinley National Park, lying within this region, contains 3,030 square miles. The entrance to the park is approximately 140 road-miles southwest of Fairbanks and 250 road-miles north of Anchorage. The park is located between north latitude 62° 15' and 64° 00' and between west longitude 148° 45' and 153° 00'.

The proposed enlarged park contains outstanding and diverse scenery with extensive geologic, glacial, and biologic significance. Man has had a moderate, but not yet serious influence on the large mammal predator-prey community. The scenic and wildlife resources constitute a major natural attraction to the people of the United States and the world.

The following discussions generally relate to the Mount McKinley region. Exceptions are those discussions describing the existing park and those for which information is not available on a regional basis. The latter are included because they indicate significant trends and considerations which provide important planning background, and are discussed on a Statewide basis.

1. THE EXISTING PARK

The existing Mount McKinley National Park is

roughly rectangular and contains 1,939,492.8 acres. Located in the interior of south-central Alaska, the park lies along the crest and northern slopes of the Alaska Range west of the Nenana River. Except for the eastern boundary along the Nenana River, boundary lines are predominately straight lines, and therefore do not follow drainage divides or contain natural ecosystems or wildlife ranges situated to provide manageable units.

The park was established by the act of February 26, 1917, (39 Stat. 938) for the purposes of public recreation and the preservation of animals, birds, fish, natural curiosities, and scenic beauty. Later acts of January 30, 1922, (42 Stat. 359) and March 19, 1932, (47 Stat. 68) added certain lands to the eastern boundaries of the park. The act of May 21, 1928, (45 Stat. 622) repealed a provision of the original act that allowed hunting of game or birds for subsistence by miners and prospectors.

The following sections of Title 16 of the United States Code are pertinent to the park:

Section 348 -- Entries Under Land Laws Not Affected

Section 349 -- Rights-of-Way In

Section 350 -- Mineral Land Laws Applicable

Section 350a -- Surface Use of Mineral Land Locations; Regulations; Registration of Prospectors and Miners

Section 351 -- Rules and Regulations

Section 352 -- Game Refuge; Killing Game In

Section 353 -- Leases; Appropriations

Section 353a -- Accommodations for Housing, Feeding and Transporting

Section 354 -- Offenses; Punishment

Section 354a -- Laws Applicable to Lands Added to Park by Section 355

Several sections of the Code of Federal Regulations are applicable. Of greatest concern here, however, is Section 36 CFR 7.44 d--Special Wildlife Protection Area. This pertains to an area



Public transportation in Mount McKinley National Park was initiated in 1972 in an effort to accommodate the surge in visitation resulting from new, easy access created by the completion of the Anchorage-Fairbanks Highway.

within 1 mile of the park road in the Sable Pass area, between mileposts 37 and 42 on the existing park road. The area is closed to all persons unless specifically authorized by the superintendent. Observing and photographing wildlife and other features are permitted from the road shoulder and designated turnouts.

Existing development within the park lies primarily along the 87-mile-long park road extending west from the single park entrance at McKinley Park Station on the Alaska Railroad and the Anchorage-Fairbanks Highway (State Route 3). Major developments are concentrated at the park entrance and include: the temporary McKinley Park Hotel (the original hotel burned in September 1972), a power plant, railroad depot, concession employee dormitories, service station, grocery store, maintenance and storage buildings, two campgrounds (capacity 10 and 75 sites), and a 3,000-foot airstrip. Park headquarters is located along the park road 2 miles west of the depot area and consists of an administration building, 11 employee residences, a heating-power plant, shop and warehouse buildings, and kennels for park sled dogs. Headquarters and railroad depot complexes have water and sewage systems. Interlocking power lines and a telephone line connect the two areas.

Five ranger stations lie along the park road. Five campgrounds with capacities ranging from 7 to 35 sites are accessible on short spurs from the park road. Wonder Lake and Savage River campgrounds have water and sewer systems; the remainder, except for Teklanika which has a water system, lack developed utilities. Eielson, a small museum-ranger station, lies 65 miles from the park entrance and has its own water and sewer systems. Eight patrol cabins are located at or near points on the park boundary. There are 44 miles of hiking trails within the park. The single-track Alaska Railroad between Anchorage and Fairbanks follows the Nenana River through Windy Pass

within the park boundary.

The primary means of travel within the existing park is by shuttle bus, a service inaugurated in 1972. Private autos are allowed on the 12 paved miles of the park road between McKinley Park Station and Savage River. The only private vehicles permitted on the remainder of the road are those of persons having campground reservations in those campgrounds beyond Savage River or going to Camp Denali or the Kantishna area.

The number of recreational visitors to the park rose dramatically from a 1971 total of 44,528 to a 1972 total of 88,615 representing a 100 percent rise, in contrast to annual increases in previous years of about 13 percent. (See Tables 7 and 8). By 1973 the number of recreational visits had climbed another 64 percent to 137,418. This rise is primarily attributed to the opening of the Anchorage-Fairbanks Highway in October 1971. Non-recreational visits recorded by NPS and consisting principally of through travellers between Anchorage and Fairbanks has grown much more rapidly and to higher levels than previously forecast. In 1973 non-recreational visits had tallied an estimated 22,849 travellers.

Approximately 846 people used the park road for access to Camp Denali and Kantishna in 1971; 550 in 1972. One hundred and seventy-one mountain climbers used the park in 1971; 197 in 1972; and 309 in 1973.

The number of people arriving via the Alaska Railroad was 24,050 in 1971, but dropped in 1972 to 12,630 possibly as a result of the opening of the new highway. In 1973, however, park-destined railroad traffic rose to 18,652. Renewed popularity of railroad travel may have been due to substantial bookings by Japanese tour groups, as well as reported shortages of charter bus equipment. While most recreational visitors travelled by private automobile or railroad,

approximately 6,000 arrived by charter bus in 1973.

In addition to the shuttle bus system, the park concessioner operates guided wildlife tours along the park road between McKinley Park Station and Eielson or Wonder Lake, on a fee basis.

Backcountry access is generally by foot from the park road, except for climbers using the Kahiltna Glacier routes who fly to the point where the existing park boundary crosses the glacier and then walk in. Miners in the Kantishna district and guests of Camp Denali, a privately operated adult environmental education camp outside the park boundary north of Wonder Lake, utilize the park road for access.

The number of backcountry users has risen significantly in recent years. In 1972 there were 6,122 backcountry users counted. In 1973 the number had grown to 13,326. Beginning immediately after the opening of the new highway, recreational use of the park during the winter months has been increasing. Although still at modest levels, it suggests that there is an opportunity for modifying the extreme seasonality which has characterized recreational use of the park in the past.

Visitor orientation and information facilities are not extensive. A lobby room in the park headquarters building doubles as office space and as an information center. There is a small interpretive, information, orientation, and campground reservation center near the Riley Creek campground. A small structure on the road at Savage River is used as a road control station. Eielson, 65 miles from the depot, contains a small exhibit-observation room with an information desk. Wayside signs at roadside pullouts serve both motorists and shuttle bus passengers.

The park road is an interpretive corridor along

which visitors may view scenery, watch wildlife (buses stop whenever large mammals are spotted), take photographs, camp, and picnic. Though hiking trails are few, backpacking and hiking are popular activities. River valleys or tundra hills offer many routes of relatively easy travel to mountains, glaciers, lakes, and other natural features. For the hardier individual, mountain climbing on Mount McKinley and many other Alaska Range peaks is an attraction, and such use is growing yearly. By Alaska's excellent standards fishing is poor; nonetheless, visitors often fish the clearwater streams and lakes. Undoubtedly, the greatest recreational activities are sight-seeing, wildlife viewing, and nature study, as evidenced by visitor reactions and direct observation of park visitors.

2. LAND USE

Although land use patterns in much of the Mount McKinley region have yet to evolve, it is possible to predict some of the pending pressures on Mount McKinley National Park. Land withdrawals made under the terms of the Alaska Native Claims Settlement Act are beginning to indicate preliminary and very general potential land use patterns around the existing park (Land Ownership map). At present there is no Statewide land use plan.

State lands to the west, south, and east of the park have potential for a wide range of recreational activities, mineral extraction, harvesting of forest products, agriculture (grazing, as of reindeer in some areas; tillage to crop and pasture in other areas), and settlement. Implementation of proposed transportation corridors will make presently inaccessible land available for such uses (The Region--Transportation map). Regional deficiency lands to the west of the existing park, lands surrounding Lake Minchumina, and d-1 lands

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north and west of the park have been identified as having in places lands suitable for agricultural use. However, recreational activities and Native subsistence uses probably will remain as the primary uses for the immediate future.

Although some State land to the south and north of the park has recently been open to entry for homesite staking purposes, all State land was closed to entry on August 15, 1973. It was closed for not less than 1 year for the purposes of reevaluating the entire statewide open to entry program.

Mineral exploration to the south and west of the area is occurring and future increases in mining activity can be expected in the Purkeypile and Chulitna-Yentna districts.

Cantwell, adjacent to the existing park boundary at the junction of the Denali and Anchorage-Fairbanks highways, may develop into a sub-regional crossroads and gateway town to the National Park. At present, it is a predominantly Native community, its income derived from the railroad and general highway services. Healy, the last town south of Fairbanks before the highway enters the park, may develop in a similar manner, although at present it is primarily a mining and railroad town.

A dirt road connects the new Anchorage-Fairbanks Highway to the Peters Hills-Dutch Hills area. A winter trail exists on the north side of the park from Healy to the Stampede areas.

The park may be entered by road only at McKinley Station. Kantishna is accessible by ground transportation only via the park road. Information from the Joint Federal-State Land Use Planning Commission's resource planning team indicates that there are a number of transportation corridors proposed by other interests throughout the State which affect the Mount McKinley region.

Existing transportation in the region is primarily by rail and highway along the route of the Alaska Railroad and Anchorage-Fairbanks Highway and by light aircraft. The Alaska Railroad is Federally owned and operated by the Department of Transportation. The railroad and its right-of-way are not under the jurisdiction of the National Park Service in those areas where it passes through park lands.

Most of the land between Anchorage and Denali State Park is State patented and tentatively approved land. Also, the Matanuska-Susitna Borough has already made some of its selections from this land, primarily in blocks adjacent to the highway. Utilization of the borough lands will be governed by the borough development plan. However, no similar plan for utilization of the State lands exists. Borough lands will be used for settlement, some industry (types presently unknown), and recreation and tourism based businesses. There is some likelihood that the Capitol relocation, recently approved by the voters of Alaska, will be to some location in the Borough.

Commercial, residential, and recreational strip development is taking place along the Anchorage-Fairbanks Highway and to a lesser degree along the Denali Highway.

The State has projected a need for regional transportation corridors for the entire State. Those in the Mount McKinley region would connect the Anchorage-Fairbanks Highway with McGrath and Kantishna, Anchorage with McGrath through Rainy Pass, and this latter route with Talkeetna. (The Region--Transportation map)

Prior to October 1971, automobile access to the park from Anchorage and Fairbanks was by a circuitous route culminating in the 170-mile long unpaved Denali Highway. The new Anchorage-Fairbanks Highway was open to traffic

in the fall of 1971 although much of it was still unpaved. Paving of the highway, with the exception of a 20-mile segment north of Cantwell, was completed in the summer of 1972. The remaining stretch of this highway will be completed within 3 years following route relocation and construction of a new bridge across the Nenana River. However, the highway is currently open to traffic year-round.

Transportation to the existing park is available via the Alaska Railroad (daily service in summer, twice weekly in winter), charter bus, daily scheduled bus, private auto, and "scheduled" airline (daily service which stops to pick up or leave passengers if requested).

Airstrips within the region are located at Healy, Lake Minchumina, Medfra, Skwenta, Talkeetna, Summit, Cantwell, two private airstrips in the Purkeypile district, and McKinley Station. The existing 3,000-foot gravel airstrip at McKinley Park is suitable only for small aircraft. Denali Air Service originates air tours of the park, on a special use permit, from this strip. Limited in length by terrain which drops off sharply at both ends, and frequently subjected to hazardous crosswinds, continued use of the airstrip is questionable.

A longer, safer, privately owned airstrip exists a few miles to the south, outside Mount McKinley National Park. Located adjacent to the Anchorage-Fairbanks Highway, this strip is close enough to the park entrance to provide a high potential for future use. Wind conditions there are better than at the Mount McKinley Park strip and the adjacent terrain is such that corollary facilities such as hangars, fuel depot, air service offices, and parking could be made a part of the complex. Hangars and fuel storage are not currently allowed at the McKinley Park strip.

There are presently nine Native allotment applications, seven private applications, four

parcels of patented land, and fifteen mining patents within the proposed additions (see Land Ownership map).

3. SOCIAL AND ECONOMIC CONSIDERATIONS

The People: The people inhabiting the areas surrounding the proposed additions to Mount McKinley National Park are a cross section of the ethnic and social diversity of the population of the State. People from the two population centers of the State, Anchorage and Fairbanks--including the substantial military populations of those cities--and a variety of rural dwellers have used the land and resources of the surrounding areas in varied ways.

In the immediate area of the proposal are small communities, interior villages, and scattered settlements located along the highway and in the "back country." These human concentrations are important features of the environment in which this proposal is made. This population includes Athapaskan Indians, Eskimos, and non-Natives, each with their own history of use and occupation of the area, and each with different relationships to the land and its resources.

The Native people of the area include the Ingalik people of the McGrath area, the Tanana Indians around Nenana and Healy, and the Athapascans of Cantwell. According to the Federal Field Committee (1968) the McGrath Ingalik on the upper reaches of the Kuskokwim were not studied by an ethnographer until 1960 when Edward Hosley attempted to piece together from the historic record and from informants some record of these people. The following is taken from Hosley, as cited in *Alaska Natives and the Land*: (Federal Field Committee, 1968)

It is apparent, from ethnographic evidence and linguistic affiliations related by informants, that

at one time there were two distinct groups of Indians in the upper Kuskokwim region. One of these, in the area extending from the South Fork of the Kuskokwim River, south to the region of Stony River and Sleetmute on the lower Kuskokwim, was most closely affiliated with the Ingalik of the lower Yukon River regions of Holy Cross, Anvik and Shageluk. The second group, from about the Tonzona River north to Lake Minchumina and the upper Kantishna River, although linguistically close to the Ingalik, was seemingly more nearly related to Indians of the Tanana region and the middle Yukon River. In addition, there is evidence that a small group of Koyukon Indians from the Yukon River settled near Lake Minchumina about the middle of the last century.

Many of the early places inhabited by the Upper Kuskokwim Native population have been abandoned. As can be seen from the population statistics presented in Table 2, the present day population is small. According to Hosley (U.S. Federal Field Committee, (1968)), *the causes of population decline and abandonment of old sites stems from river channel changes and erosion, the attraction of present-day McGrath and Medfra with their modern services, and, importantly, the end result of the dedimation in numbers, caused by diseases such as diptheria and smallpox, shortly after the first contacts with Americans around the turn of the century. Most of the abandoned communities were reduced to but one or two families, who continued to live there until the older people died.* (Hosley, 1961, as cited in Alaska Natives and the Land, Federal Field Committee 1968).

Both Native and non-Native residents of Cantwell use the game resources of the foothills of the Alaska Range, but also participate in the wage economy, principally through services to tourists

and travellers along the new Anchorage-Fairbanks Highway.

The present-day community of Nenana has attracted people from several now abandoned Tanana River sites, as well as from throughout the interior.

These Native people have experienced varying degrees of pressures from the dominant society and the market economy. For example, Nikolai has been fairly isolated from white influences until recently; Nenana, on the other hand, has been subject to contact for a longer period and has been involved in the market economy of the interior beginning with the gold rush period of the early 1900's.

The non-Native population of the area is located at the several small communities and at scattered locations along the highway and railroad and in "back country" areas. They have been attracted to the area by a variety of factors-mineral exploration and development potentials, opportunities for independent frontier-type lifestyles, opportunities to serve the sport hunting and recreational visitors to the area, and wage employment opportunities in the construction and maintenance of the Alaska Railroad and the coal mining operations of Healy. Others are employed by Federal agencies, such as the Federal Aviation Administration. Most non-Natives engage in subsistence use of the fish and animal resources of the surrounding areas. Some have settled as homesteaders and supplement their subsistence income with part-time wage employment.

POPULATION AND SETTLEMENTS

The twelve communities or settlements surrounding the proposed park additions have a total population of approximately 1,773 persons. Table 2 shows the current population estimates for these communities, with the July 1973 figures on Native enrollment under the provisions of the

Table 2
CURRENT POPULATION ESTIMATE
and
NATIVE ENROLLMENT

Village	Native Enumeration July 1973	Non-Native Population U.S. Census 1970	Total Current Population Est.	Percent Native	Native Enrollment* July 1973
Anderson	14	n.a.	362 ^{2/}	-	4
Cantwell	35	27	62	56	70
Healy	15	64	79	19	10
Lake Minchumina	4	n.a. ^{3/}	43 ^{3/}	-	7
McGrath	139	140	279	56	179
Medfra	2	n.a.	2	-	5
Nenana	246	121	367	67	450
Nikolai	86	26	112	76	94
Summit	-	34	34	0	-
Suntrana	n.a.	67	67	-	-
Talkeetna	40	182	222	18	66
Telida	16	-	16	100	25
Usibelli	n.a.	102	102	-	-
Usibelli Mine	<u>n.a.</u>	<u>65</u>	<u>65</u>	<u>-</u>	<u>-</u>
TOTAL	597	828	1,173		910

Estimated rural population of Matanuska-Susitna Borough in the general area adjacent to the proposal area - 4,142
n.a. Not Available

1/ Natives must enroll at a particular village - not necessarily current place of residence -- to receive benefits under the Alaska Native Claims Settlement Act

2/ Total from 1970 Census of Population

3/ Permanent non-Native residents currently estimated to be between 7 - 11. Numerous Native and non-Native summer seasonal residents come annually. (BIA, Fairbanks)

Sources: "Alaska's Population and School Enrollments," (compiled by B.C. Lin from census data), *Review of Business and Economic Conditions*, Dec. 1971, VIII:5, Institute of Social, Economic and Government Research, University of Alaska.

Alaska Native Enrollment - Summary Listing July 1973. Bureau of Indian Affairs, Department of the Interior

Alaska Native Claims Settlement Act. The latter figures are important because they indicate the potential numbers of Native people who relate to these communities, and who will be part of the considerations of the Native village and regional corporations as they plan and implement programs in their areas. With a few exceptions, notably Anderson, Nenana, McGrath, and Usibelli, these villages have experienced a decline in population in the last decade.

The Matanuska-Susitna Census Division reported a total population of 6,509 in 1970. Excluding Talkeetna (222), and Summit (34) shown in the accompanying table, there remain some 6,253 people in the division. Approximately 1,007 reside at designated localities and settlements in the rural farming areas in and around Palmer in the Matanuska Valley and beyond the immediate area of concern here. However, the remaining 4,142 live at dispersed and isolated sites northward along the highway and adjacent lands of the Susitna River valley. A significant portion of this scattered rural population probably occurs in the general area of consideration here.

The village of Talkeetna, a predominately white settlement which has almost tripled in population since 1960, is an important staging area for air charter service to Mount McKinley climbing areas. With the exception of Wasilla, other Matanuska-Susitna Borough communities experienced population declines in the period 1960 to 1970. McGrath has served as a transportation and service center for the surrounding area, and for the mining activities along the northern slope of the Alaska Range. It has grown by about 16 percent since 1960. Healy is a railroad service station, and has an active coal mining operation nearby at Usibelli. It is the location of a large electric power generating plant for the Golden Valley Electric Association (GVEA) serving the rural areas of Fairbanks North Star Borough. The cluster of communities here --

Healy, Usibelli, Usibelli Mine and Suntrana -- have grown by 75 percent since 1960, probably as a result of GVEA activities. Summit is primarily an air and highway transportation service point. It has a major air strip and facilities of the Federal Aviation Administration.

Nenana, at the confluence of the Nenana and Tanana Rivers, is an important transportation center, with river docking facilities, railroad depot, and major airstrip. Located on the Anchorage-Fairbanks Highway between Fairbanks and Healy, and enroute to the present Mount McKinley Park entrance, it provides traveler services such as service stations and restaurants. Its substantial non-Native population is engaged in the retail trades and service industry. It provides facilities for the trans-shipment of freight from railroad to air cargo carriers bound for the various mining operations in the northern foothills of the Alaska Range. The nearby community of Anderson has grown as a residential area for the Clear Radar Station facilities, and is now as big as Nenana. This partially accounts for the limited population increase (about 27 percent) of Nenana since 1960.

Cantwell is a railroad depot established during the construction of the railroad and currently serving as a point along the route for track maintenance. The State Division of Highways has a road maintenance station in Cantwell. A State trooper and State magistrate are located at the village. Residents are increasingly involved in providing services and facilities for travelers along the Anchorage-Fairbanks Highway. Cantwell has experienced a net loss of population, dropping by 27 percent since 1960.

Educational facilities vary from community to community. Healy, McGrath, Nenana, and Talkeetna have both elementary and high schools with a total school enrollment of 722 in the 1971-72 school year. The school at Anderson has

grades Kindergarten through 10th grade with 130 students. The villages of Cantwell and Nikolai have elementary schools. Enrollment at Nikolai was 30 pupils. (Alaska Educational Directory 1972-73)

Health facilities are limited in the area. Most people must travel either to Fairbanks or to Anchorage for hospital services. For those villages falling in the U.S. Public Health Service's Tanana Service Unit, there is an Alaska Native Hospital at Tanana. A private Fairbanks physicians group operates a medical clinic at Suntrana, near Healy, staffed by a physician's assistant and nurse, and has a regularly scheduled physician available. A public health nurse regularly visits communities of the area.

The Native villages of McGrath, Nenana, Nikolai, and Telida are members of the Tanana Chiefs Conference and Doyon Ltd. Regional Corporation. Talkeetna Natives are in the Cook Inlet Regional Corporation; Cantwell is in the Ahtna Regional Native Corporation.

4. ECONOMIC ACTIVITIES AND RESOURCE USES

a. SUBSISTENCE

Subsistence and other resource harvest activities produce a share of the food, fuel, and other raw materials needed for a livelihood. If these natural resources were not available, cash would be needed to buy their equivalents. They are an important "income" for rural Alaskans, both because of the extremely limited and unreliable sources of cash income, and because the harvesting, preparation and use of natural resources constitute a style of life and the basis of traditional and contemporary social and cultural patterns. Historically the Ingalik Athapascans of the Upper Kuskokwim relied on fish, moose, waterfowl and aquatic furbearers. Edward Hosley, in his study of the McGrath Ingalik (1961) presents a description of the modern subsistence round of

the people of Nikolai. The material presented below is taken from Hosley's discussion as cited in Alaska Natives and the Land, Federal Field Committee (1968), to provide an historic perspective on earlier and traditional activities and to suggest the features of the natural environment which influence subsistence activities of present-day residents--both Native and non-Native.

...in the spring, shortly before or after the river ice breaks up, families without school-age children leave Nikolai and travel downstream in their boats to the vicinity of Medfra. The remainder follow in early June, at the end of the school year. Near Medfra, usually scattered at wide intervals for two or three miles on both sides of the river, the Indians set up their summer fish camps in groups of two or three families... The groups customarily remain sedentary until early September.

The Indian families usually return to the same fish camp site for several summers, and the location is considered to be the property of the families occupying it. Changes of location, however, occasionally are made in mid-summer because of a relocation of fish wheels...

Upon reoccupation of a site in the spring, the men return the fish wheels to the river. These are drawn up on the banks during the winter, to prevent damage from the ice jams. Each family has at least one fish wheel, and usually more than one. Until the salmon run in the early fall, however, these collect only a dozen or so fish a day, mostly whitefish. Fish wheels were introduced into the Kuskokwim River region about 1910-1920, by Americans. They are large paddle-wheel affairs, constructed of peeled saplings, scrap lumber, and chicken wire. They are turned by action of the current, and dip fish swimming upstream into baskets.

Fish wheels are most often placed on the outside of a curve in the river, where the water is usually deepest and swiftest, and are

generally located within walking distance of the fish camp....

Despite the fact that the river near Nikolai is narrower than at Medra, and thereby a better location for fishing, the people travel downstream to Medfra. In part, this is in order to be close to the store and post office located there. More important, however, is the fact that once the fish camps have been set up, and fish wheels repaired and placed in the river, the men have little to do until early August, when the salmon run begins. They therefore are free to take summer jobs in McGrath and elsewhere, particularly with the Forest Service [actually Bureau of Land Management] fire crews. The presence of a radio-telephone and an airfield at Medfra facilitates their appraisal of, and transportation to, areas where work is available.

In early August, the men of Nikolai who have been working, return to their fish camps and prepare for the salmon run. At this time, they may cut winter wood for the few whites in the area, and for shipment by barge to McGrath. In addition, they may build new fish wheels, tend a few small garden plots, and hunt. Berries ripen at this time, and the women and children usually spend several days gathering them.

During the salmon run, the fish are cleaned and split, and then either dried in the smoke houses, or salted in barrels for winter use. Fish are now used primarily for winter dog feed; the people subsisting largely on purchased staples. In September, with the onset of cold weather, the McGrath Ingalik return to Nikolai village, and the children return to the school there which has been in operation for five or six years. At this time also, they harvest their small garden plots at Nikolai, which they have tended from time to time during the summer. The crops grown are primarily potatoes, with some rhubarb, lettuce, carrots, onions, and turnips.

The amount of land cultivated, however, is generally small, and the average plot for a family is only about 20 feet square.

In preparation for the winter season, dog harness is mended, dog sleds and snowshoes constructed or repaired, and prior to the river's freezing, boats are removed from the water, painted and repaired. Some wood for winter fuel may be cut, but this is customarily obtained only as needed, since anyone with a large supply for wood soon loses it to his neighbors and relatives.

In the fall, some hunting is done, mainly for moose and ducks in season, and preparations are made for fur trapping. The furs thus obtained are primarily beaver, although numbers of other skins are also obtained. With a full limit of 20 beaver skins, a family can expect to add several hundred dollars to their income. Although the prices for fur fluctuate, large prime beaver pelts bring as much as twenty dollars in McGrath or Medfra. The men follow set trap lines, usually the same one every winter. The region is, however, beginning to be trapped out, and the Indians are finding it necessary to go far afield to obtain results. The trap lines are run by dog team, although there has been a tendency for the more affluent men to have their supplies flown out to the trap line. Most families have at least one dog sled, to which the teams are hitched in tandem.

During the early spring, little is done at Nikolai aside from some occasional hunting and trapping, and periodic trips by dog team to Medfra for mail and supplies. The people are usually impatient for warmer weather, and at the first sign of thaw or spring breakup, several families will immediately prepare to leave for their summer fish camps, although it may be several weeks before the snow leaves the ground.

The above seasonal round is quite different from that which was observed in earlier times. Up until

some 40 or 50 years ago, it was the practice of the Nikolai group to travel in the early spring from their village, then located several miles further upstream, to the mouth of Big River to the south. There, they would be joined by relatives from Vinasale, and the people would then travel by dog team southeastward toward the Alaska Range, reaching the foothills prior to the spring breakup of the river ice. This group would then spend the summer in the foothills, traveling northeastward across the upper reaches of the Middle Fork of the Kuskokwim River, Windy Fork, and Sheep Creek.

During this time, the Indians would hunt and fish, drying the meat for winter use. By fall, prior to the onset of freezing weather, the group would have reached the headwaters of the South Fork of the Kuskokwim. Here, they would build bull boats of caribou hides stretched over a sapling framework, load their summer's catch, and return downstream to their villages.

That this was a general aboriginal practice for the region is indicated by the statements of Mr. Bob Stone, a white resident of the area for some 40 years. He stated that in his earlier days, he saw numerous abandoned summer campsites on McKinley and Foraker Creeks in the Kantishna drainage, often with moose blinds still in place on the sand bars. McGrath Ingalik informants stated that it was also a general practice, in former times, for Eskimos from far down the Kuskokwim River to ascend to the Alaska Range to hunt caribou. This was done in the spring by means of the Stony River Drainage. Upon reaching the foothills, these Eskimos would also spend the summer months hunting and drying the meat for winter use. They would move north to the headwaters of Big River, and occasionally as far as the South Fork of the Kuskokwim River. There in the fall, the Eskimos would construct sewn-skin boats, and descend to the Kuskokwim River and their own villages to the south. Contacts between Eskimos and the

McGrath Ingalik were few and peaceful, however, and the Eskimo boats usually drifted past the Ingalik villages without stopping.

The McGrath Ingalik are well integrated into our money economy, and depend upon furs and summer work for the bulk of their income. State aid also plays an important part in their economy, with old age assistance and aid to dependent children amounting to over \$1,000 a month. The average yearly income of an Indian family at Nikolai is from \$1,700 to \$2,000 a year. The Indians obtain a substantial amount of their subsistence from the environment, including game, fowl, fish, and berries in season, but they purchase the bulk of their food from the store at Medfra. Staples include flour, sugar canned goods, coffee, tea, butter, eggs, bacon, and powdered milk. Except for some articles of winter wear, all clothing is also purchased either at Medfra or McGrath, and occasionally also through mail-order houses.

As a result of this dependence upon the stores for most of their needs, and the sporadic nature of their income, most things are purchased on credit, and the Indians usually have a standing debt of from \$50 to \$200. In addition, they rarely buy large quantities of food, preferring to make frequent trips to Medfra, even during the winter months.

As can be seen from the foregoing discussion, traditional Native subsistence use patterns have shifted substantially in the last few decades. Almost all rural residents, Native and non-Native, probably engage in some subsistence activities, although existing subsistence uses are not well documented within the proposed additions. Some fishing occurs in the streams and lakes to the southwest of the present Cantwell withdrawal area. (Ahtna, Inc., 1973)

A survey was conducted by the Doyon, Ltd.,

Native Corporation in 1973. The information was obtained by the regional representative's solicitation of information from Native residents/councils/committees in the respective villages. A 1967 Bureau of Indian Affairs survey was used for some cross-checking. The data are subject to some limitations and constraints. The representatives received only token orientation for interview work, were under pressure from other work requirements and time limits and were forced to rely substantially on letter contact. There was very little checking or verification of some apparently low, or high, submissions. On the survey forms footnotes were used to clarify inventories, in particular certain species of fish. Art Patterson of the Resources Planning Team FSLUPC, assisted in the compilation and presentation of the data. The results have been added to this statement (Appendix G).

People from Cantwell, situated as they are in a high mountain valley, rely more heavily on moose, caribou, bear and sheep than on lowland wildlife species or fish. Little is known about levels of subsistence hunting in the Cantwell area, except that it does occur with moose, sheep, and caribou the primary species sought. Most of this is thought to occur outside of the proposal boundaries, with the exception of some fishing to the southwest of the village, as noted above. (Ahtna, Inc., 1973) A few individuals and families living at scattered locations within the proposed additions on Native allotments or patented homesites or private applications pursue a subsistence lifestyle. One individual is reported living and trapping at the confluence of the Bearpaw and Kantishna Rivers (Bishop, Alaska Conservation Society), and one family lives in the Birch Creek - Kantishna area engaged in subsistence resource harvest. Historically, some trapping activity has taken place around Lake Minchumina, and this is probably continuing. A resident of Lake Minchumina reports that the area is used for subsistence hunting, trapping, fishing and berry-picking by the

people who live at the Lake. Trapping extends as much as 35 miles from the Lake, mostly to the east, west, and south. Fishing is limited to the Lake, itself, and hunting to the Lake shore and creeks that run into it, the Muddy River flats, and, rarely, nearby lakes. Practically all moose hunting is done within 1/2 mile of water that can be reached by river boat from the Lake. (Collins, Comments) People from Minchumina have in the past usually found caribou to the south. (Bishop, ACS, Comments) Annual family take figures are presently unavailable.

An unknown, but probably small, amount of trapping may occur northwest of Telida, with some hunting and trapping activities extending into the proposed additions. Caribou and other hunting by the residents of Telida and Nikolai takes place wherever caribou are found; for Nikolai hunters in the last five years this has generally been from the South Fork of the Kuskokwim River west, but caribou are most often found south and east of Telida if they are available at all. (Bishop, ACS, Comments)

Most, if not all, rural Alaskans, Native and non-Native, derive an important portion of their food and material needs from subsistence harvest of wildlife and plant resources. While Native people probably do not depend on subsistence harvests to the extent they did traditionally, and some new methods, techniques and equipment are being used, seasonal subsistence activities still serve as an important source of food, shelter and fuel, and a vital cultural link with their past. For non-Natives who have settled in the area, who have chosen to forego many of the comforts and conveniences of urban society in order to pursue a life in close company with the land, subsistence is a cherished part of their lifestyle.

It has been noted that these activities probably occur at low levels on lands proposed for addition to Mount McKinley National Park, and probably

occur at modest levels on lands adjacent to the addition. Further field study is needed to document existing, established subsistence use patterns and locations. Given the variability of wildlife populations, and the fluctuation in numbers and distribution of some species such as the caribou, moose, and beaver, it is possible that subsistence users will shift their areas of activity over a period of years to obtain needed resources. It seems unlikely that rural Alaskans will abandon subsistence pursuits in the foreseeable future, even if sources of cash income become more readily available or more reliable.

b. SPORT HUNTING

People from beyond the immediate area are attracted to some areas of the proposed additions for caribou and moose hunting. Anchorage game guides use some of these areas for sport hunting clients. Hunters from the Tanana Valley area, including Fairbanks, are interested in the caribou accessible from the Stampede trail on the north side of the Alaska Range near Healy. Harvests of caribou are for recreational purposes, as well as for necessary food values.

Additional hunting for the combined values of recreation and food resources is carried out by hunters from Anchorage in the areas to the south and east of the present park. The Denali highway, as well as the southern end of the Anchorage-Fairbanks Highway, provide access for personal use hunters and non-resident sport hunters to good moose and caribou hunting grounds. The Sunflower Basin, just outside the proposal boundary in the Chelatna Lake area, is a popular hunting area. Less affluent local Native and non-Native residents with more pressing economic need to harvest game are sometimes at a disadvantage in competing with these urban hunters who may have better equipment-including ability to pay for air charter service into good

hunting areas, automobiles to reach points distant from places of resident, etc.

In the proposed southern extension, the best hunting in general is in the western portion, beyond the Kahiltna River. From the Tokositna River east relatively little wildlife is believed to occur. Although extensive areas south of the proposed extension contain good wildlife populations, the best access, by air, is in and just adjacent to the proposal boundary, along open ridges just above timberline. Easiest hunting is along the timberline fringe. Recent increase in hunting pressure on these lands, primarily out of Anchorage, is substantial (pers. comm., ADF&G). ADF&G prefers hunting based on air access in this area rather than by snowmobile, as such access is easier to control, and less distasteful. Spring grizzly hunting occurs on the ridges. At least 13 sheep were taken in the Yentna area between 1968 and 1972. About 68 moose were taken in the Sunflower Basin-Chelatna Lake-Fairview Mountain area, and 8 in the Yentna drainage above the forks in 1973.

The following data relates to the proposed northern extension and its vicinity, and includes all reported harvest, not distinguishing between sport and subsistence take. Some recent yearly caribou harvests follow.

<u>AREA</u>	<u>1969-70</u>	<u>1970-71</u>	<u>1971-72</u>
Kantishna River,			
Stampede	18	11	43
Kantishan Village		4	
Lake Minchumina	2		12
Bearpaw, Toklat			5
Sushana			2
Otto Lake,			
Savage River	<u>8</u>	<u>6</u>	<u>20</u>
Area Total,			
including location			
unidentified	28	21	85

Reported harvest is lower than usual in recent years, probably due to unavailability of animals near traditional hunting areas north of the park (Stampede Trail, Kantishna). Due to a sharp decrease in herd numbers, Game Management Unit 20 C, which covers most of this region, has a reduced limit of one caribou per person.

Recent moose harvest data within or adjacent to the proposed north extension from ADF&G:

AREA	1970	1971	1972	1973
Minchumina	5	9	6	
Muddy River	5	6		12
Savage River	4	8	10	
Toklat River	1	1		29
Stampede	7	9	11	
Fish Creek			4	
Clear Creek				5
12-Mile Lake		1		
Otto Lake		2		
Kantishna River	3	13	11	23
Total of above	25	49	42	69
Minimum no. cows		2	1	3
Total 20 C Harvest	605	496	462	4,76+

Despite decreasing harvests in Game Management Unit 20 C in recent years, the southwestern portion of the unit has contributed substantial numbers, reflecting its importance in terms of hunting pressure and use. Such use for trophy and for meat hunting-recreational purposes is expected to increase along the Stampede Trail by the expanding Fairbanks population.

Most grizzly bear hunting occurs on guided hunts by two commercial operators, although some are taken by residents along Savage and Toklat Rivers. Recent harvest data from ADF&G:

Year	Toklat	Upper Kantishna	Total Within Proposed Extension	Total Unit 20 Harvest
1969	4	2	6	26
1970	2	2	4	25
1971	0	6	8	30
1972	11	4	14	36
1973			7	29

Unit 20 grizzly bear harvest has stabilized the past five years. Younger and smaller bears have comprised this harvest. The central portion of the Alaska Range, occupying a relatively small portion of bear habitat within Unit 20, continues to furnish the majority of the harvest. This area extends from the Delta to the Toklat Rivers, partly within the proposal area. It is not known whether this reflects higher bear density or more intensive hunting pressure and guiding activity.

Spring harvests rarely exceed one-half of the fall take within the unit. The 12 year average spring take is one-fourth of the annual average. A greater portion of spring than fall hunting is by non-guided residents. Male bears over the past 6 years average about 61% of the total harvest. Five year mean age, skull size, and hide size average 8.9 years, 20.9 inches, and 12.8 feet respectively.

Wolf harvest during the 1973-74 regulatory year in the proposed north addition totaled at least 24 (Toklat River-13, Kantishna River-11) out of a total harvest for Unit 20 C of about 210 animals.

Wolverine harvest during the same period within the addition totaled about 12 (Teklanika-Toklat-Savage area-6, Kantishna-6) out of a total unit take of about 90 animals.

SPORT FISHING

Present sport fishing use of the area is low,

although increasing. The potential sport fishery is medium-high, better in the proposed northern extension than within the existing park.

COMMERCIAL FISHING

According to ADF&G, local residents fish commercially to some degree for 3 species of salmon (kings, cohos, and chums) on two of the drainages within the proposed northern extension.

TRAPPING

Trapping effort in the areas, according to ADF&G, is confined to beaver trapping by residents of Minchumina and several wolf and wolverine trappers at Kantishna and Bear Paw. Effort and harvest are considered minor in terms of the overall management unit, but substantial in terms of the drainages being utilized.

c. *THE MARKET ECONOMY*

Sources of wage employment and the life of the communities of the area around the park reflect the various sectors of the market economy present in the region. The construction of the railroad, and later the highways linking the two major population centers of the State, and the establishment of the Mount McKinley National Park have had a major influence on the regional economy. Railroad and highway maintenance and construction have contributed income to the people of the several communities. Some people derive an income from trapping activities.

Mining has been important in the region, and continues to be a source of income and employment at a modest level. Gold, silver, copper, lead, and antimony have been extracted. The official production records for lode mines in

the Kantishna district show modest levels of extraction through 1970. (See further discussion of metals production in section 9 of this chapter.) Minerals patents have been issued for 15 claim groups aggregating 738.5 acres within the Mount McKinley region (Table 11, section 10, Economic Geology). Lands legally located and maintained under the mining regulations amount to 45 legally located and maintained claim groups encompassing 6,440 acres. These lands are concentrated chiefly in the Kantishna area, although most of the active claims are in the Stampede area. There are also concentrations of claims south of the Alaska Range between the "mineral belt" and the park but not within the National Park Service area of ecological concern (Land Ownership map).

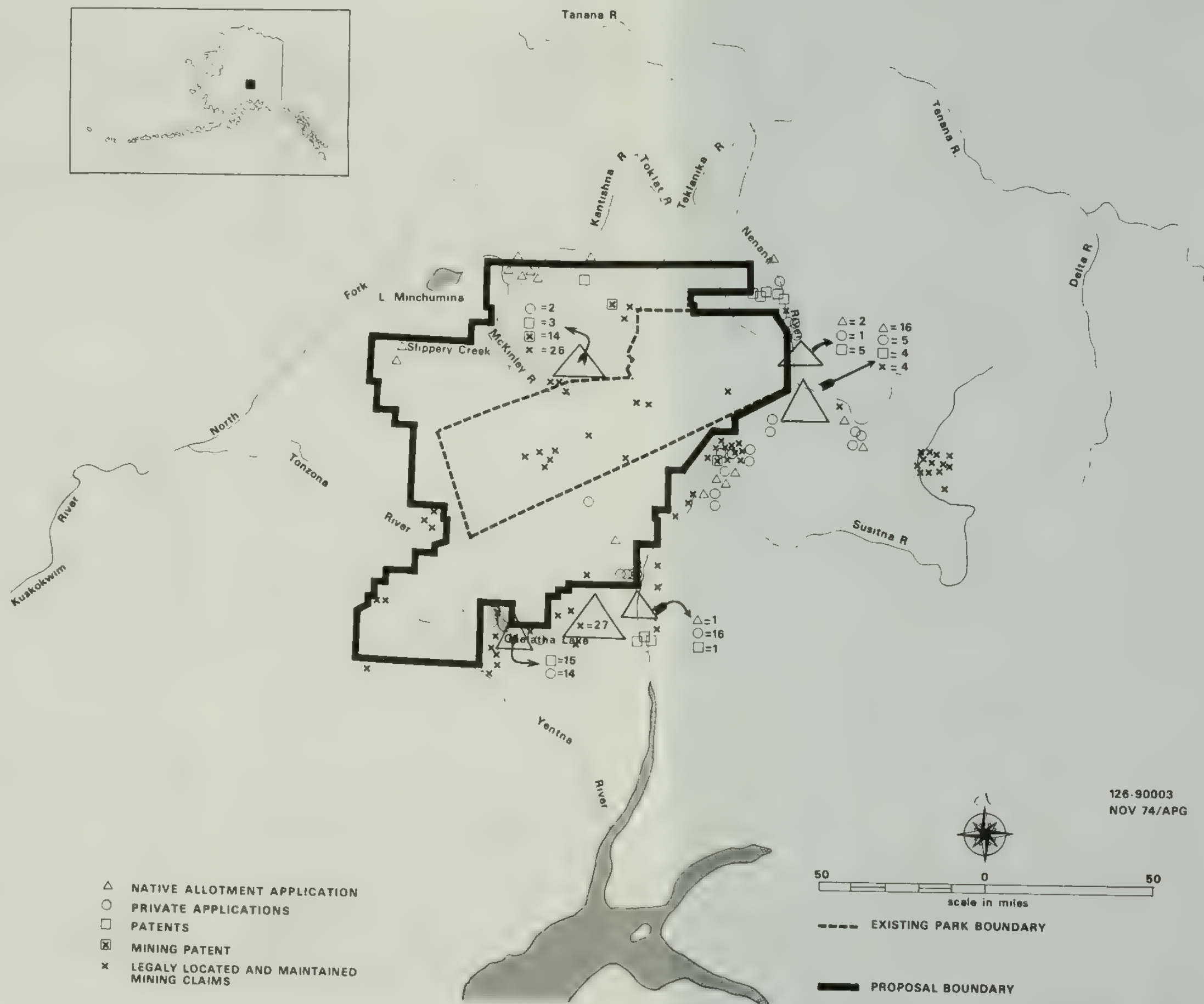
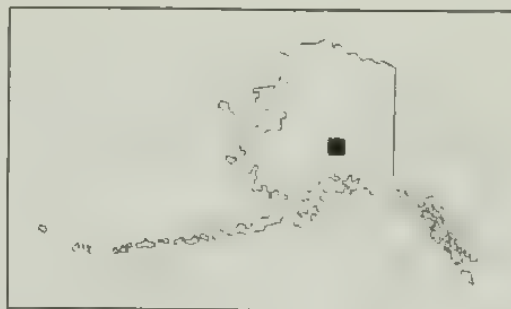
The value of these mining activities to the people inhabiting the region, in terms of employment and income, is not known. Some local people undoubtedly are involved, but it is likely that much of the activity is carried out by mining companies coming into the area from other parts of the State and the country.

The Usibelli Company coal mining operations at Healy, however, have provided substantial employment and income to the people residing at Healy. With the operations of the electric power generating plant, and the Alaska Railroad, the people of Healy have a steady source of employment and income.

Government functions and services offer opportunities of wage employment and are a source of cash income to the people of the region. The Alaska Railroad is especially important, providing employment for the people of Cantwell, Talkeetna, Healy, and Nenana, and other numerous small settlements along the railroad right-of-way. The Federal Aviation Administration operates facilities at Summit, McGrath and Nenana with salaried staffs. Contract construction of the highways and State Division of Highways



LAND OWNERSHIP



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maintenance operations are important in the region and provide seasonal as well as some year-round employment and cash income.

Administration of the schools of the area provides employment for approximately 70 people as principals and teachers. (Alaska Educational Directory, 1972-73) Additionally, residents of the area are employed as maintenance workers, janitors, and food service workers. Healy, Cantwell, Nenana and Talkeetna schools contract for school bus service, providing additional employment opportunities for the residents of those communities.

The U.S. Postal Service is a source of income for the postmasters located at the principal communities. In early 1973, the State Department of Public Safety had State Troopers at Anderson (near Clear radar site), Nenana, Healy, Cantwell, and Talkeetna. The State Department of Fish and Game had protection officers stationed at Anderson and at McGrath. The Bureau of Land Management administers a regional fire fighting operation at McGrath. Additional Emergency Firefighters (EFF's) are hired as needed. In 1972, 66 worked as EFF's from McGrath (42), Medfra (7), and Nikolai (17) with average earnings per person about \$970. In 1973, 48 EFF's from McGrath (33) and Nikolai (15) worked with average seasonal earnings of \$472 per person.

A military installation located at Clear is operated by a civilian contractor. Employment at Clear makes an important contribution to the local economy along the highway and at Nenana. Anderson, nearby, serves as a residential community, with some governmental services as noted above.

Other State and Federal governmental services include the administration of health and welfare services, National Park Service administration, military installations near Nenana, State Division of Aviation, and others.

Government expenditures which contribute to the cash income of the area include public assistance. In addition to limited unemployment compensation payments and social security benefits, the residents receive three types of income assistance: Bureau of Indian Affairs payments; food stamps; and State welfare payments including the categorical programs of Old Age Assistance, Aid to the Blind, Aid to the Disabled, and Aid to Families with Dependent Children. The number of recipients and the average dollars received per household have increased in recent years along with the increases in population at certain localities. The material living standard for some persons who now utilize both subsistence and public assistance has undoubtedly improved.

d. PUBLIC UTILITIES:

Two telephone companies serve the area employing maintenance and repair workers at Healy. The Golden Valley Electric Association employs a sizeable staff of technicians and maintenance workers at its Healy generating plant. Cantwell has a privately owned and operated electric power generator serving the community., as does Lake Minchumina. The Northern Commercial Co. provides electric power to the residents of McGrath.

5. TOURISM AND SERVICES INDUSTRIES

Tourism and allied services, which include visitor accommodations and facilities, traveler services, air charter service, guiding and recreational services to campers, sport hunters and fishermen, and backcountry users, arts and crafts, and souvenir sales are important components of the regional market economy. Tourism has been increasing significantly in the area in recent years. The completion of the new highway linking the two

major urban areas of the State--Anchorage and Fairbanks--and providing road access to areas with valuable recreational and scenic values, including the existing park, has produced rapid and dramatic increases in park visitation and general travel to and through the area. It assures the continued importance of tourism and recreation and traveler-oriented service sector in the region.

The people of the surrounding communities are not involved equally in the tourism industry, however. At present, *"no local economies exist comparable to those surrounding units of the Park system in other states."* according to Rich and Tussing (1972). A portion of the State's total tourism-related primary employment of 4,050 in 1973 undoubtedly occurs within the rail/highway belt along the eastern boundary of Mount McKinley National Park. A number of registered guides and outfitters derive an income from activities in areas surrounding the present park and in those areas being proposed for addition to the park. A privately operated wilderness camp at the western boundary of the existing park attracts visitors, who gain access through the park. The concessioner at Mount McKinley employs a seasonal staff of between 100 and 125. Much of the hiring for these tourist services is not from the local villages, but comes from the cities of Anchorage and Fairbanks and from outside the State.

A private tourist development, oriented to the highway traveler, is located about seven miles from the park entrance. It is a family operation supplemented by seasonal help from the immediate vicinity and from metropolitan areas. Further south along the highway, another family operation offers food and cabins to the tourist during the summer season. Another private commercial establishment, open on an intermittent basis, is located south along the highway. It also is essentially a family operation.

Cantwell has overnight accommodations, a grocery store and service stations catering to sport hunters, construction workers and tourists.

These are essentially family businesses which regularly hire additional help.

To the north of the park entrance, Healy has a hotel-restaurant which is operated as a concession of the Alaska Railroad. It employs a number of local people. Also near Healy is a small family-operated service station- motel-restaurant. A summer-operated bar/cafe a few miles off the highway and accessible by road caters to local residents of the area surrounding Healy, Suntrana, Usibelli and Usibelli Mines, as well as sport hunters and tourists.

Other cafes and service stations north and south along the highway, as well as a growing number of private campgrounds both north and south of the park entrance bring an income to numerous local residents. Campgrounds of America plans to open a facility near Healy in the near future, and another privately operated camper park is being developed in the canyon area just south of the Mount McKinley Park entrance.

Talkeetna plans to take an increasingly important role in the tourism industry of the McKinley area. It is favorably located within easy driving distance of the Anchorage-Palmer metropolitan area. The economic base of the town is described in the Matanuska-Susitna Borough Comprehensive Development Plan (May 1970):

Today tourism and recreation, particularly hunting and fishing groups and mountain climbing expeditions, provide a mainstay of Talkeetna's economy. There are three privately owned flight and guide service businesses in Talkeetna. Talkeetna is the takeoff point for climbing expeditions to Mount McKinley, and in the summer, there

TABLE 3

EMPLOYMENT AND WAGES IN ALASKA'S
TOURIST INDUSTRY

	<u>1964</u>	<u>1967</u>	<u>1970</u>	<u>1972</u>	<u>1973</u>
Number of Tourists	59,000	86,700	129,000	182,300	215,300
Tourist Impact	\$18,200,000	29,000,000	45,000,000	65,630,000	72,000,000
*Primary Employment	1,100	1,650	2,500	3,470	4,050
Primary Wages	6,600,000	10,900,000	15,500,000	22,922,800	26,819,500
*Secondary Employment	500	750	1,200	1,750	2,050
Secondary Wages	3,000,000	4,950,000	7,440,000	11,550,000	13,513,500
*Total Employment	1,600	2,400	3,700	5,220	6,100
Total Wages	9,600,000	15,850,000	22,940,000	34,472,800	40,333,000

* Non-Government Employment

Source: Expanded by the Alaska Travel Division, State Department of Economic Development from Cresap, McCormick & Paget, "A Program for Increasing the Contribution of Tourism to the Alaskan Economy." (Prepared for the U.S. Department of Commerce, Economic Development Administration, 1968). March, 1974.

TABLE 4
COMPARISON OF WAGES, 1964-1972

Industry	Total Wages (millions of dollars)				Change 1967-1972		Change corrected for inflation * 1967-1972	
	1964	1967	1970	1972	Amount	Percent	Amount	Percent
Contract Construction	66.0	95.2	107.0	153.4	58.2	+61.1%	122.4	+28.6%
Oil & Gas	8.5	24.2	45.0	34.6	10.4	+43.0%	27.6	+14.0%
Logging, Lumbering &Pulp	19.8	27.6	28.2	40.8	13.2	+47.8%	32.6	+18.1%
Tourism	6.6	10.9	15.5	22.9	12.0	+110.0%	+18.3	+67.9%
Metal & Other Mining	4.3	4.2	5.0	31.3	27.1	+645.2%	25.0	+595.2%

* The deflator for 1972 is 125.3, with 1967=100. (\$125.30 in 1972 buys the same amount as \$100 did in 1967)
Federal Reserve Bulletin Vol. 60, No. 6, June 1974, p. A55

Source: Alaska Department of Labor, Employment Security Division *Non-Agriculture Wage and Salary Employment and Earnings by Industry*, Statistical Quarterly, 1964, 1967, 1970, 1972 (Figures rounded) and Alaska Travel Division

is an influx of tourists who come to Talkeetna to view Mount McKinley. The town has a lively reputation as a party town. Even in the winter some Anchorage residents spend the weekend in Talkeetna. The opportunity to travel by train is an added incentive to visit the community. There are four lodges in Talkeetna and an estimated 10 to 12 commercial establishments in town depend heavily upon the business of transients, mountain climbing parties and tourists.

An overview of tourism in Alaska is contained in the document "Strategies for Economic Development in Alaska" (U.S. Federal Field Committee for Development Planning in Alaska, 1971) which states:

Alaska possesses the basic ingredient for a successful tourist industry in great abundance--its superlative attractions. The Great Land itself; its openness, scenery, grandeur, and variety offer an experience to the urban-suburban people of America that will steadily become more irresistible...

Most visitors visited or wanted to visit tourist attractions on the federal domain--the national parks and monuments. The greatest regional impact is in southcentral and southeast, where roads, ports, transportation, and hotel facilities are available. On the other hand, the highest per capita expenditures were made by hunters and fishermen.

The main deterrents to growth in this industry are seasonality, lack of accessibility to tourist attractions, overcrowding of those that are accessible, lack of suitable accommodations, and the time it takes to visit Alaska. The highway

or ferry methods require more time than the average person has for a vacation, so many can come only by air.

The State of Alaska, Department of Economic Development, Alaska Travel Division has made extensive studies of some of the characteristics of the visitor to Alaska, the most pertinent of which follow:

--average travel group: 2.6 people (90 percent of all groups are less than 4 people)

--78 percent of all travelers are over 40

--74.3 percent of the heads of parties during 1971 were in professional or management occupations; students were less than 5 percent

--over 80 percent of the visitors rate Alaska as an above average place to vacation. The only State with a higher percentage is Hawaii

--the average length of stay in 1971 was 13 days

--the average party spent \$500.00

--80 percent came with pleasure as their primary purpose

--over 20 percent are repeat visitors

--41 percent came from the three westcoast states: Washington, Oregon and California

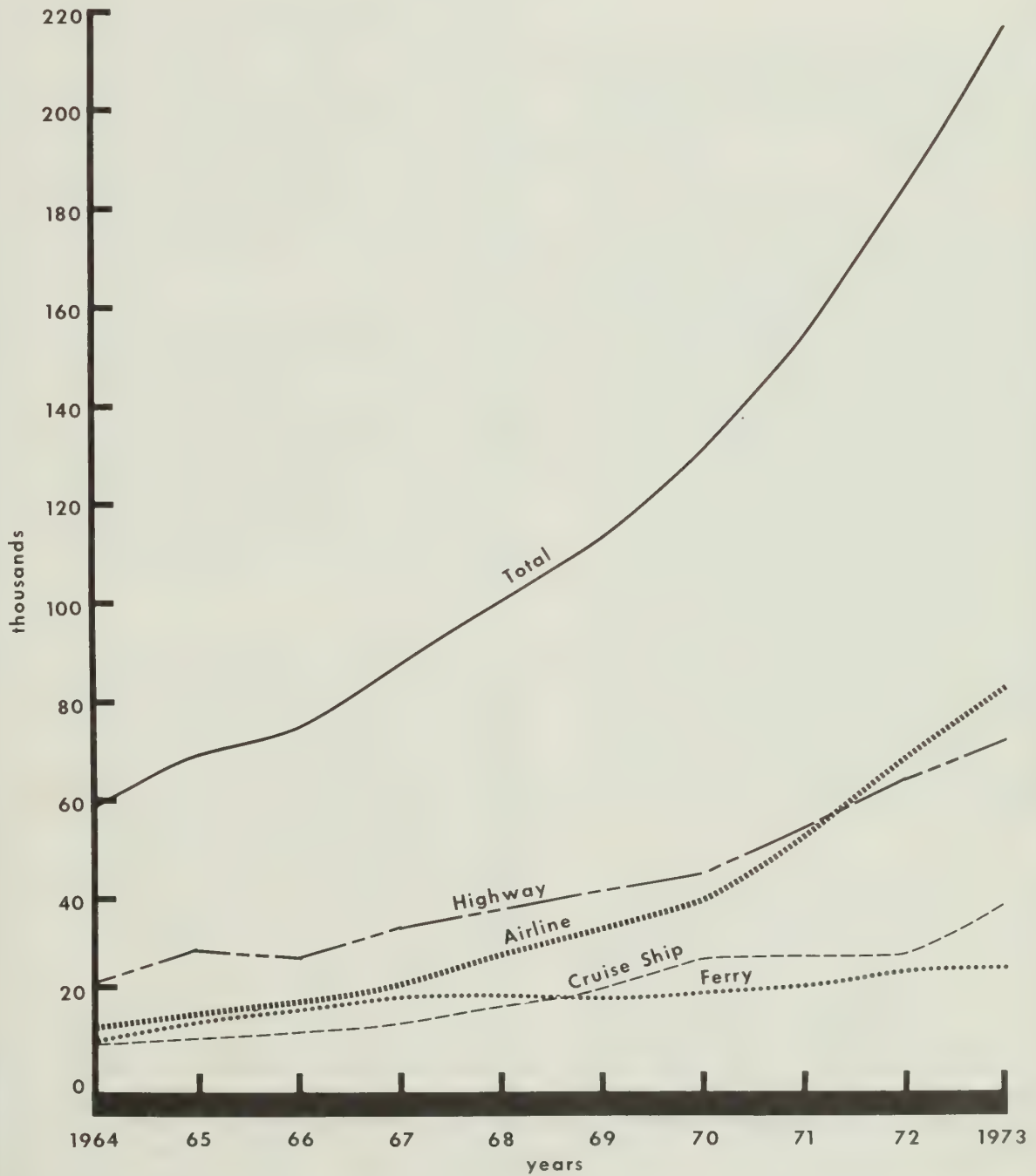
The numbers of tourists entering Alaska have been steadily increasing. The 1973 figures on tourists entering Alaska (215,700) surpassed the earlier conservative estimate of 186,000 to be reached in 1975. Revised forecasts through 1980, based on projected sharp increases in the capability of the cruiseship market in 1973 and 1974, and a 14 percent annual rate of increase between 1975 and 1980 place the number of out-of-State tourists at

TABLE 5
NUMBER OF TOURISTS ENTERING ALASKA
BY
MODE OF TRANSPORTATION

	Cruiseship	Ferry	Airline	Highway	TOTAL
1964	11,000	11,650	13,250	23,300	59,200
1965	11,700	14,400	15,100	28,400	69,600
1966	12,400	17,300	16,250	27,150	73,100
1967	13,200	18,950	20,600	33,950	86,700
1968	17,300	19,000	26,400	37,000	99,700
1969	20,000	19,500	32,000	40,500	112,000
1970	27,000	20,000	38,000	44,000	129,000
1971	27,000	22,000	50,500	53,500	153,000
1972	27,800	24,500	67,000	63,000	182,000
1973	38,000	25,000	81,000	71,000	215,700

Source: Alaska Travel Divison, State Department of Economic Development. November 1973

NUMBER OF TOURISTS ENTERING ALASKA
BY
MODE OF TRANSPORTATION
1964 - 1973



Source: Alaska State Dept. of Economic Development, Alaska Travel Division.

553,000 by 1980 (See Table 6).

All studies indicate that scenery (including Mount McKinley itself), wildlife, mountains, glaciers and wildflowers (all abundant resources in the existing park) are among the most often mentioned reasons for visiting Alaska.

Until 1972 the greatest proportion of tourists coming to Alaska travelled to the State via highway. In 1972 the numbers arriving by air outstripped those arriving by highway (See Table 5 and chart). The trend continued in 1973. The effect of the energy crisis on this trend has not been determined, but it could be accentuated. It might be expected that the energy shortages could curtail travel by private automobile in favor of the various modes of multi-passenger travel, both to and within Alaska. Shortages of gasoline could give an impetus to the increasing use of the railroad as access to the Park and to other recreational areas in the immediate environs of the railroad. This in turn could draw potential demand away from the service businesses located along the highway. It seems likely that air travel within the area--for sightseeing, hunting, fishing and mountaineering expeditions--is likely to increase as more people come into the area and to the Park, and as visitor accommodations and services are established in the vicinity of the park and the surrounding communities.

As noted above, out-of-state tourism to Alaska is expected to continue to increase, with comparable increases in employment, wages and expenditures attributable to tourism. Alaska resident outdoor recreational users can be expected to increase along with general population increases. Forecasts for recreational visitation to Mount McKinley National Park based on current trends and projected facilities at the existing park, indicate that by 1980 more than 400,000 tourists and vacationers will come to the park (See Table 8).

While tourism ranked among the leading industries in the State in 1973 (See Table 4), and has become a more important factor in the State's economy it is difficult to evaluate its contribution to local and regional economies, and in turn to measure the role which Mount McKinley National Park has played in stimulating local and regional tourist-oriented services sector. Statistics compiled by the State on tourism-related employment and wages is available on a State-wide basis (See Table 3).

In 1973 the State's tourism industry accounted for an estimated 6,100 jobs (including secondary employment) and an estimated \$40.3 million in wages statewide. This represents a 312 percent increase in the nine years between 1964 and 1973 (See Table 3). Tourist expenditures are estimated at \$72.0 million statewide in 1973. A portion of these jobs, payrolls and expenditures occurs in the communities in the vicinity of Mount McKinley National Park as a result of visitor use of park facilities.

The park concessionaire undoubtedly obtains the greatest portion of dollars spent on lodging and meals; travel services located outside of the immediate area (in Anchorage and Fairbanks) probably receive the bulk of the monies spent on transportation. Nevertheless, at least a portion does go to local businesses catering to tourists. Expenditures of sports hunters and through travellers contribute additionally to some local businesses, principally guides, air charter businesses, gasoline and auto service stations.

As noted above, there is some disparity among the communities of the area in the extent of involvement in the tourist/outdoor recreation services industry. Some communities, such as Talkeetna have sought to attract tourist business. Others, such as Cantwell have been largely by-passed--either by choice, or for lack of expertise or access to necessary investment capital.

TABLE 6
NUMBER OF TOURISTS ENTERING ALASKA
FORECAST
REVISED MARCH 1973

Year	Number of Visitors	%Growth
1973	215,700	18%
1974	252,500 (236,000 actual)	17% (10%+)
1975	287,800	14%
1976	328,000	14%
1977	373,900	14%
1978	426,200	14%
1979	485,800	14%
1980	553,800	14%

The sharp increase of 1973 and 1974 are attributable to a sudden projected increase in the capability of the cruise ship market given the implementation of current plans.

This updated chart also illustrates the additional growth that will be attainable with the development of the Japanese market and a longer tourist season. A 14% annual increase is equal to the historical average growth for the previous eight years.

TABLE 7

MOUNT MC KINLEY NATIONAL PARK

Actual Visitation Historical Data

1922 - 1970 ^{1/}

1970 - 46,000

1969 - 45,400

1968 - 33,300

1967 - 39,800

1966 - 31,300

1965 - 21,400

1964 - 19,200

1963 - 18,400

1962 - 16,600

1961 - 18,300

1960 - 22,500

1959 - 25,800

1958 - 25,900

1957^{2/} 10,700

1956 - 5,200

1955 - 3,400

1954 - 5,000

1953 - 6,800

1952 - 7,300

1951 - 7,800

1950 - 6,700

1949 - 4,800

1948 - 4,500

1947 - 3,500

1946 - 1,100

1945 - 19

1944 - 0=

1943 - 12

1942 - 5

1941 - 1,700

1940 - 1,200

1939 - 2,300

1938 - 1,500

1937 - 1,400

1936 - 1,100

1935 - 900

1934 - 600

1933 - 400

1932 - 400

1931 - 800

1930 - 1,000

1929 - 1,000

1928 - 800

1927 - 700

1926 - 500

1925 - 200

1924 - 62

1923 - 34

1922 - 7

^{1/} No distinction was made between recreational and nonrecreational visits until 1971. However, it is estimated that approximately 1 percent of annual visitation was nonrecreational between 1959 and 1970. Prior to then all visits recorded can be considered recreational.

^{2/} In 1957 the Denali Highway was opened, making it possible to drive to the Park. Prior to then the Alaska Railroad and small aircraft were the only means of access to the Park.

Source: National Park Service, Alaska State Office, Anchorage.

TABLE 8

MOUNT MC KINLEY NATIONAL PARK ACTUAL VISITATION^{1/}
RECENT YEARS 1971 - 1974

<u>Recreational Visits</u> ^{2/}	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>
January	-	-	34	42
February	-	22	122	28
March	-	23	379	535
April	-	13	1,239	415
May	1,838	2,048	7,788	14,699
June	10,406	15,417	17,962	
July	18,877	35,967	53,720	
August	9,968	24,839	37,031	
September	3,439	9,804	18,500	
October	-	278	172	
November	-	178	201	
December	-	36	135	
Total	44,528	88,615	137,418	
Percent Increase		50%	64%	
<u>NonRecreational Visits</u> ^{3/}				
January	-	1,990	2,956	8,296
February	-	2,900	5,266	9,772
March	-	3,100	10,044	18,926
April	-	3,300	10,500	17,280
May	4	30,370	64,800	43,621
June	19	21,585	21,798	
July	5	64,093	26,436	
August	12	46,293	27,879	
September	24	27,579	19,680	
October	7,200	8,060	11,364	
November	3,450	4,596	13,074	
December	3,100	3,536	9,052	
Total	13,814	217,412	222,849	

^{1/} The National Park Service makes a count of vehicle traffic along the portion of the Anchorage-Fairbanks Highway which runs through the Park. Number of visits is determined by applying a multiplier factor to account for passengers in vehicles counted. This is adjusted seasonally.

^{2/} Actual counts are made of visits to campgrounds, on the shuttlebus, wildlife tours, in the backcountry, as well as hotel clients. Actuals counts are made of visitors arriving by railroad and aircraft.

^{3/} Nonrecreational visits are essentially travellers passing through the area along the Anchorage-Fairbanks Highway, not park-destined travellers.

This may change in the future if Native village and regional corporations decide to make local investments, or to assist individuals and communities to obtain the necessary training and financing for such enterprises. Technical assistance available through Federal and State agencies may succeed in redirecting a greater share of the tourist dollar to the local communities.

Current operating expenditures of Mount McKinley National Park make only a modest contribution to the local economies of the region since few materials necessary for operation are purchaseable in the respective localities and since seasonal employees, including those hired in Alaska probably spend only a small amount of their wages in the local communities. Few of the Alaska residents hired for these jobs come from the surrounding communities. In FY 1974 Mount McKinley National Park employed 15 permanent employees and 94 seasonal workers, of which 37 were hired in Alaska. Table 10 shows wages paid for permanent and seasonal employees in FY 1972, 1973, and 1974. Projected employment and payrolls for FY 1974 and beyond reflect the increased staffing needs expected with continuing increases in visitation, as well as increased traffic along the Anchorage-Fairbanks Highway with its attendant maintenance and patrol requirements.

Park concessionaire operating expenditures and maintenance costs account for some cash flow in the area. In 1971 they were as follows:

Maintenance and Operations	\$ 88,743.69
Procurement	253,340.03
Payroll	<u>212,133.46</u>
TOTAL	\$554,217.18

In addition to visitors to the existing park, other outdoor recreational users and sportsmen are attracted to the general region of Mount McKinley both north and south along the rail/highway belt.

Local resident guides depend on the out-of-state big game hunters for a substantial portion of their income.

No figures are available on the number of guided hunts or local expenditures by sportsmen, but they are undoubtedly important to many local and regional businesses. Anchorage and Fairbanks based guiding, air charter and sporting goods businesses probably also derive a portion of their income from hunters and sportsmen destined for the McKinley rail/highway belt.

6. REGIONAL RECREATIONAL OPPORTUNITIES

Other than Mount McKinley National Park, the only important, officially established recreational area in the vicinity is Denali State Park. (The Region--Transportation map) This new and presently undeveloped 282,000-acre park is adjacent to the d-2 withdrawal south of Mount McKinley National Park, approximately halfway between the McKinley Park entrance and Anchorage. The State intends it to be a major recreational center. There are no other known, organized recreational areas in the region. Development for Denali State Park is currently proposed to occur primarily in the Byers Lake area and to include four major components: (1) a highway facility consisting of a commercial lodge and restaurant, a service station, a store, and an information center; (2) a hotel complex including hotel-lodge facility, winter sports area, aerial tramway, and observation terminal; (3) an airport; and (4) public campgrounds.

Capacities have not been determined except that a 200-site campground will be constructed by the State, to be operational by 1974. Construction has begun on several components of the plan.

Development of facilities such as these by the

TABLE 9

PRELIMINARY FORECAST OF RECREATION
USE AT
MOUNT MC KINLEY NATIONAL PARK

	<u>Year</u>	<u>Recreational Visits</u>
(Actual)	1973	137,300
(Projected)	1974	225,700
	1975	257,900
	1976	292,300
	1977	332,700
	1978	356,600
	1979	380,100
	1980	406,400
	1981	434,400
	1982	464,400
	1983	494,000
	1984	524,000
	1985	554,000
	1986	584,000
	1987	614,000
	1988	644,000

TABLE 10

WAGES PAID IN MOUNT MC KINLEY NATIONAL PARK

Permanent and Seasonal Employment, FY 1972 - FY 1974

	Numbers Employed			Wages Paid			
	Permanent	Total Seasonal	Seasonal Hired in Alaska	Permanent	Total Seasonal	Seasonal Hired in Alaska	Total Wages Paid
1972	13	46	31	\$138,249	\$193,694	\$108,935	\$331,943
1973	11	64	37	204,722	182,472	158,022	387,194
1974	15	74	37	202,711	256,866	185,382	459,577

Source: National Park Service, Alaska State Office, Anchorage

Note: In the summer of 1974 (FY 1975) the National Park Service entered into a maintenance contract with the Ahtna Corporation for Mount McKinley National Park. The contract was in the amount of \$21,000 and employed three persons from the village of Cantwell.

State Park system, and/or private enterprise, may reduce the need to utilize Mount McKinley National Park lands for extensive overnight accommodations and tourist services. In the past, development of recreational facilities by the State, other Federal agencies, and the private sector has occurred primarily in two areas: (1) near Anchorage and Fairbanks, the two major population centers of the State; and (2) along the portions of the State highway system connecting Anchorage and Fairbanks to the Alaska Highway. The former has been designed primarily to fulfill the recreational needs of the urban population of the State. The latter is primarily oriented to needs of the tourist using the Alaska Highway and the State highway system. Mass recreational opportunities such as downhill skiing are available in the Anchorage area. A developed State recreation area at Nancy Lake and a number of waysides exist near Anchorage. Chugach State Park (512,450 acres), within 10 miles of Anchorage, offers 91 campsites, canoeing, fishing, hiking, hunting, cross-country skiing, and snowmobiling opportunities.

Opportunities for activities such as hunting, fishing, cross-country skiing, snowmobiling, backcountry hiking, dog sledding, etc., are widely available throughout the region. One outfitter, the Mercer Ranch at Lignite supplies mountain climbing parties by pack horse. Similar opportunities to those available within the existing Mount McKinley National Park and proposed additions are available in adjacent portions of the Alaska Range and in the Talkeetna Mountains (between Anchorage and the Alaska Range east of the Susitna lowlands) and the Chugach Mountains (east of Anchorage). These existing facilities, especially those near the urban areas, are important to planning in the Mount McKinley region as they will serve to reduce demands for similar facilities within the park.

7. CLIMATE

Mount McKinley National Park and its surrounding region are located in two of the major climatic zones of Alaska. The two zones are separated by the Alaska Range which forms a barrier to the coastal winds which bring moisture from the Pacific Ocean and Gulf of Alaska. The climate north of the range is continental in character--hotter in summer and colder in winter than the area in the south along the coast.

Weather data for the park, reflecting a 30-year average, was obtained from recording devices at park headquarters. Data applicable to the region was obtained from reports by the State climatologist, who analyzed records at Lake Minchumina, Summit, and Talkeetna.

Annual temperature extremes range from 90 degrees to -52 degrees Fahrenheit. Mean maximum and minimum temperatures at McKinley Station are as follows:

<u>Month</u>	<u>Maximum °F</u>	<u>Minimum °F</u>
January	12.8	-5.2
February	17.3	-0.9
March	23.4	1.8
April	37.8	16.8
May	51.8	30.7
June	63.8	40.4
July	65.9	43.8
August	61.4	39.9
September	51.4	32.6
October	35.4	18.4
November	19.2	2.3
December	13.3	-4.1

The average 24-hour temperature spread during the travel months, June through August, is only 22 degrees. Wider daily swings occur in winter; the record is 63 degrees, from -44 degrees to 19 degrees on December 30, 1961. Since there are many variables affecting local temperatures, the

only safe generalization is that temperature in the region of the park tends to decrease with height. Summit Station at 2,400 feet has an average annual temperature of 25.5 degrees compared with Talkeetna's 33.3 degrees at 345 feet. While measurements at higher levels are largely conjectural, it is understood that the annual mean on the higher peaks would average below zero; recordings of -100 degrees have been made by scientific parties on the McKinley summit. Chill factors in excess of -140 degrees have been experienced there.

Average precipitation at park headquarters is a little over 15 inches; snowfall is 75.7 inches. Winters have less precipitation than summers. November has the lowest monthly average at .31 inches; March has the winter high at 1.25. The record for the three warm months shows 2.86 for June, 3.79 for July, and 2.34 for August. Although annual precipitation is nearly the same at all four stations, there is marked variation in the number of days that rain occurs during June, July, and August--21 days at McKinley and Lake Minchumina, 36 at Talkeetna, and 45 at Summit. Snow drifts to 20 feet or more at higher levels, but at park headquarters the normal snowpack is 20 inches with maximum at 44 inches. Flash floods occur throughout the region. Thunderstorms are rare.

Calm days are the rule in summer. Turbulence is more characteristic of fall and winter. Maximum velocity recorded at headquarters is 60 miles per hour, but this is a rarity. Winds in excess of 100 miles per hour are not uncommon on McKinley's summit.

Intimately related to the weather is Mount McKinley's visibility and frequent invisibility. North-trending winds commonly pile up clouds on McKinley's south flank and then surround it; but, because of its sheer immensity and height, the mountain mass tends to generate its own weather

and its own private cloud formation, even on days that may otherwise be clear. One result is that many visitors to the area go away disappointed, never having glimpsed the mountain itself. No reliable data are obtainable on the extent to which McKinley is actually visible from various vantage points, but a rough visibility index may be generated from National Park Service studies, the park staff, journals maintained at Wonder Lake and Eielson, and cloud cover data from the Talkeetna, Summit, and Lake Minchumina weather stations. During the three summer months of visitation, the peak is totally invisible about 30 days, visible 4 hours or less about 30 days, and visible more than 4 hours on another 30 days. However, it is a rarity when the peak is visible all or most of any one day; in point of total daylight time, it seems safe to state that the peak is hidden well over half of the time, and often hidden many days in a row.

8. PHYSIOGRAPHY

The Mount McKinley area lies principally in the Alaska Range section of the Alaska-Aleutian province of the Pacific Mountain System. Lowlands north of the Alaska Range lie in the Tanana-Kuskokwim lowland section of the Western Alaska province. Between these sections lie the Northern Foothills of the Alaska Range. A small portion of the area south of the Alaska Range is in the Cook Inlet-Susitna lowland section of the Coastal Trough province of the Pacific Mountain System. (Wahrhaftig, 1965)

The Alaska Range consists of a series of two and sometimes three parallel, rugged, glaciated mountain ridges 6,000 to 9,000 feet in altitude. In the vicinity of Mount McKinley, mountain peaks rise to altitudes of 10,000 to 13,000 feet. Mount McKinley is 20,320 feet high and Mount Foraker, 14.5 miles to the southwest, reaches an altitude of 17,400 feet.

The range is perpetually snowclad above about 7,000 feet on its north side and 6,000 feet on the south. Hundreds of alpine glaciers, coalescing into intricate systems, occupy canyons and gorges. South of the range, glaciers tend to be larger and longer than on the north, because of greater snowfall.

Most of the largest glaciers in the south lie beyond existing park boundaries. Largest of all glaciers in the region is the Kahiltna Glacier, 45 miles long and 3 miles wide, and only partially in the park. Other large magnitude glaciers on the south side of the range are the Ruth, Eldridge, Tokositna, and Yentna glaciers, all outside the existing park. The 34-mile long Muldrow Glacier is the largest glacier on the north side of the range.

The Northern Foothills of the Alaska Range consist of a series of subparallel east-trending ridges with altitudes ranging between 2,000 and 4,500 feet. The Foothills vary from 3 to 7 miles in width and 5 to 20 miles in length. The ridges are separated by low, rolling valleys 2 to 10 miles wide.

Beyond the Northern Foothills belt lies a broad region of lowlands (altitude 600 to about 1,600 feet) drained by the Tanana and Kuskokwim rivers. Lowlands also lie adjacent to the Alaska Range on the south. Here the range elevations reach 3,000 feet but throughout most of the region (beyond proposed area boundaries) the land lies at less than 500 feet above sea level.

The Mount McKinley region is bounded by the Kuskokwim Mountains to the west, the Talkeetna Mountains and the Broad Pass depression to the south and east, and the Yukon River on the north.

9. GEOLOGY

Wahrhaftig (1965) describes the internal structure

of the Alaska Range as a synclinal complex with Cretaceous rocks in its center and Paleozoic rocks on the flanks. Longitudinal faults, the principal one being the Denali fault of regional extent, trend approximately parallel to the trend of the range. Fault traces are marked by linear valleys, low passes, scarps, and sag ponds.

Rocks immediately north of the Denali fault consist of a regionally metamorphosed middle Paleozoic and older sedimentary sequence of sandstone, siltstone, limestone and argillite. Metamorphic rocks, which include schist, underlie much of the northern foothill ridges and appear as isolated hills jutting above the unconsolidated deposits in the Tanana-Kuskokwim lowlands. A Tertiary rock sequence (Cantwell Formation) contains abundant volcanic rocks. The upper part of the Cantwell Formation is predominantly volcanic flows and tuffs (USGS, 1974). A thick conglomerate cover near the top of the Tertiary rock section forms ridges where dips are steeper than 20° and broad dissected plateaus where the conglomerate is flat-lying (Wahrhaftig, 1965).

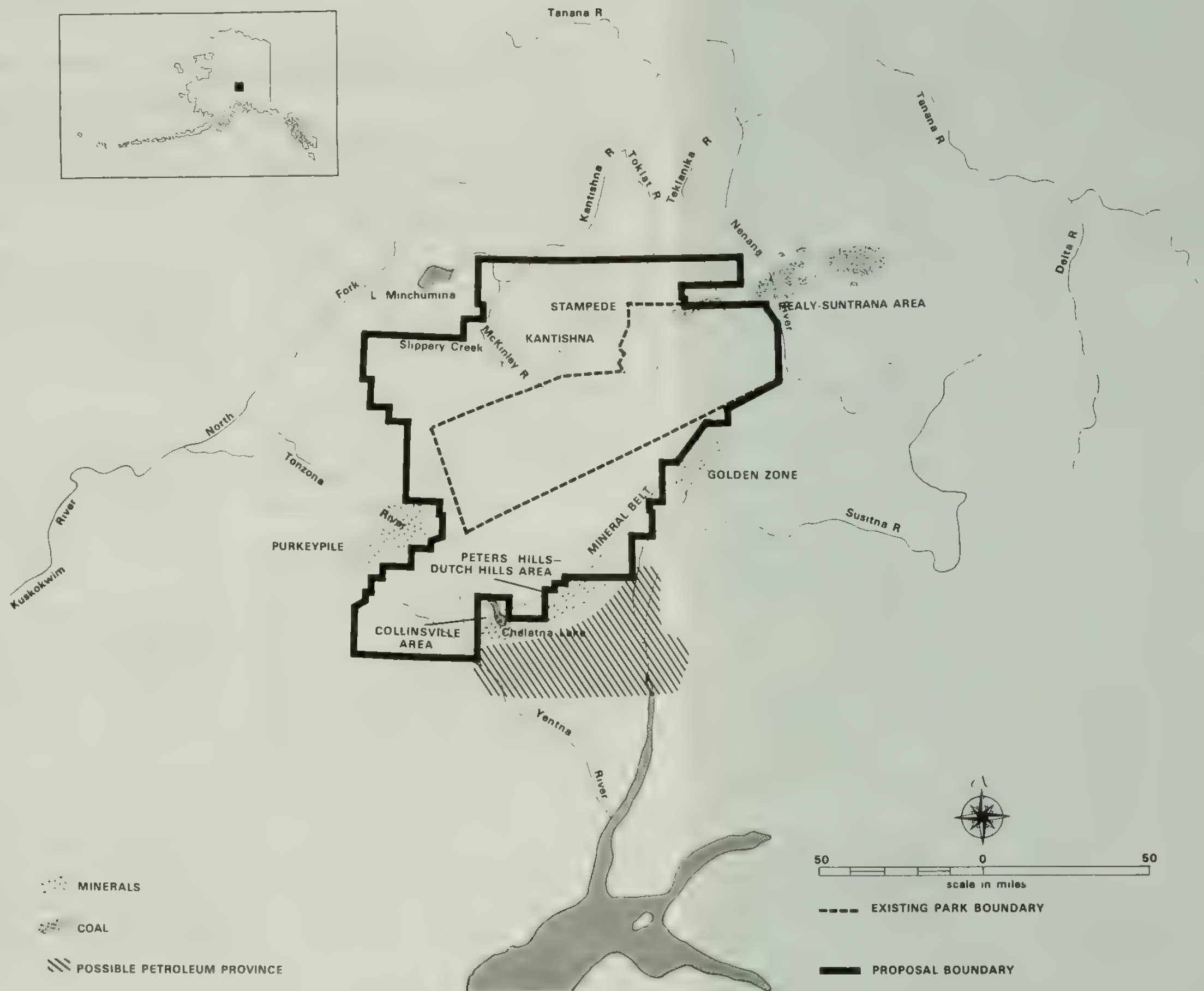
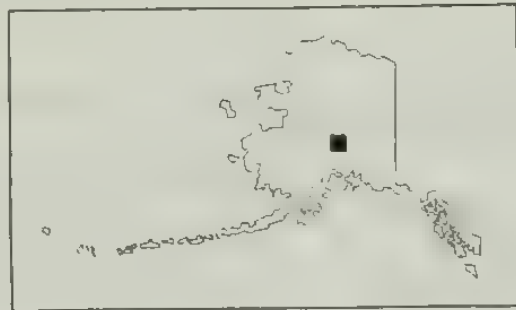
Rocks south of the fault are characterized by a monotonous sequence of predominantly dark gray argillite, slate, graywacke, and a few intervals of limestone of late Paleozoic(?) and Mesozoic age (USGS, 1974).

Tertiary sedimentary and volcanic rocks occupy lowlands within the existing park and also form east-west trending ridges along the north flank of the range (USGS, 1974). Much of the present topography probably resulted from erosion and removal of the relatively weaker Tertiary rocks.

Granitic plutons (igneous rock bodies) support groups of high mountains that have glacier-carved canyons and cirque headwalls rising almost vertically to heights of 5,000 feet. Eroded granitic rocks are the most rugged and scenically striking landforms in the region. Notable examples are Mt.



MINERAL AREAS



McKinley, Mt. Foraker, Cathedral Spires and the Great Gorge of the Ruth Glacier. The latter two areas are within the d-2 withdrawal south of the existing park. The granitic rocks south of the fault (Mt. McKinley sequence) are of a different chemistry (quartz monzonite and granite) and age (55-60 m.y.) than rocks along the Denali fault (granodiorite, 38 m.y.) (USGS, 1974).

Beyond existing glaciers, morainal and glacial outwash deposits extend into the northern foothill belt and cover large areas of bedrock. Except for the widening of some valleys by past advances of Alaska Range glaciers, the foothill section was never glaciated. Four periods of glaciation are recognized in the Mount McKinley region (Wahrhaftig, 1965).

South of the Alaska Range, the Cook Inlet-Susitna lowland is mantled by ground moraine, drumlin fields, eskers, and glacial outwash plains, nearer to the Range valleys are broad and flat-floored with sides showing glacial trim lines. A few rock-floored lakes occur in the area. Largest is Chelatna Lake, 7 miles long.

Bedrock beneath the lowland is mainly poorly consolidated Tertiary rocks (coal bearing) which are flat-lying or only slightly deformed. Mesozoic metamorphic and granitic rocks occur as isolated mountains near the center of the lowland beyond the study area boundaries.

10. ECONOMIC GEOLOGY

The Mount McKinley area is separated into two distinct geologic environments by a fault zone of regional extent, the Denali fault. The dominant rocks north of the fault zone are Precambrian and Paleozoic schist and gneiss. Plutonic and volcanic rocks occupy relatively small areas while Tertiary sedimentary rocks extend over much of the northwest portion of the north addition area.

Lowlands comprising the western third of the area are floored by quaternary gravels and alluvium.

Mineral patents have been issued for 15 claim groups aggregating 738.5 acres within the Mount McKinley region. (Table 11) Lands legally located and maintained under the mining regulations amount to 45 groups consisting of 365 claims encompassing about 6,440 acres. These lands are concentrated chiefly in the Kantishna area, although most of the active claims are in the Stampede area. There are also concentrations of claims south of the Alaska Range between the "mineral belt" and the park, but not within the National Park Service interest area.

The primary mineral areas are shown on the mineralized areas map. The Kantishna district was a former gold boom area. There is a probable existence of significant metallic resource potential in the Kantishna-Stampede district despite its relatively modest production record.

Records of metal production are often useful in appraising the potential of formerly active mining areas. It should be realized, however, that neither the magnitude of such production nor its absence provide sufficient evidence to a district's potential. This only can be done subsequent to the most detailed on-site investigation usually involving core drilling or other subsurface work. In general, production records pertaining to regions deficient in transportation facilities have little significance. Official production records exist for lode mines in the Kantishna district.

Metal production totals, through 1970, follow:

Gold (ozs)	6,263
Silver (ozs)	14,146
Copper (lbs)	639
Lead (lbs)	13,801
Antimony (lbs)	1,890,391

Placer production figures through 1960 were assembled by the Geological Survey in 1972.

<u>District</u>	<u>Gold (oz)</u>	<u>Silver (oz)*</u>
Kantishna	45,000 to 50,000	4,500 to 5,000

* Arbitrarily figured at 10 percent of gold production.

A mineralized region, the Chulitna-Yentna mineral belt (Hawley and Clark, 1973) includes, from south to north, the Collinsville, Peters and Dutch Hills, and silver molybdenum, lead and zinc (USGS, 1972). There are minor occurrences of tin, tungsten and chromite. USGS estimates the potential in the upper Chulitna district at \$17 million and \$2 million in the Yentna district, and

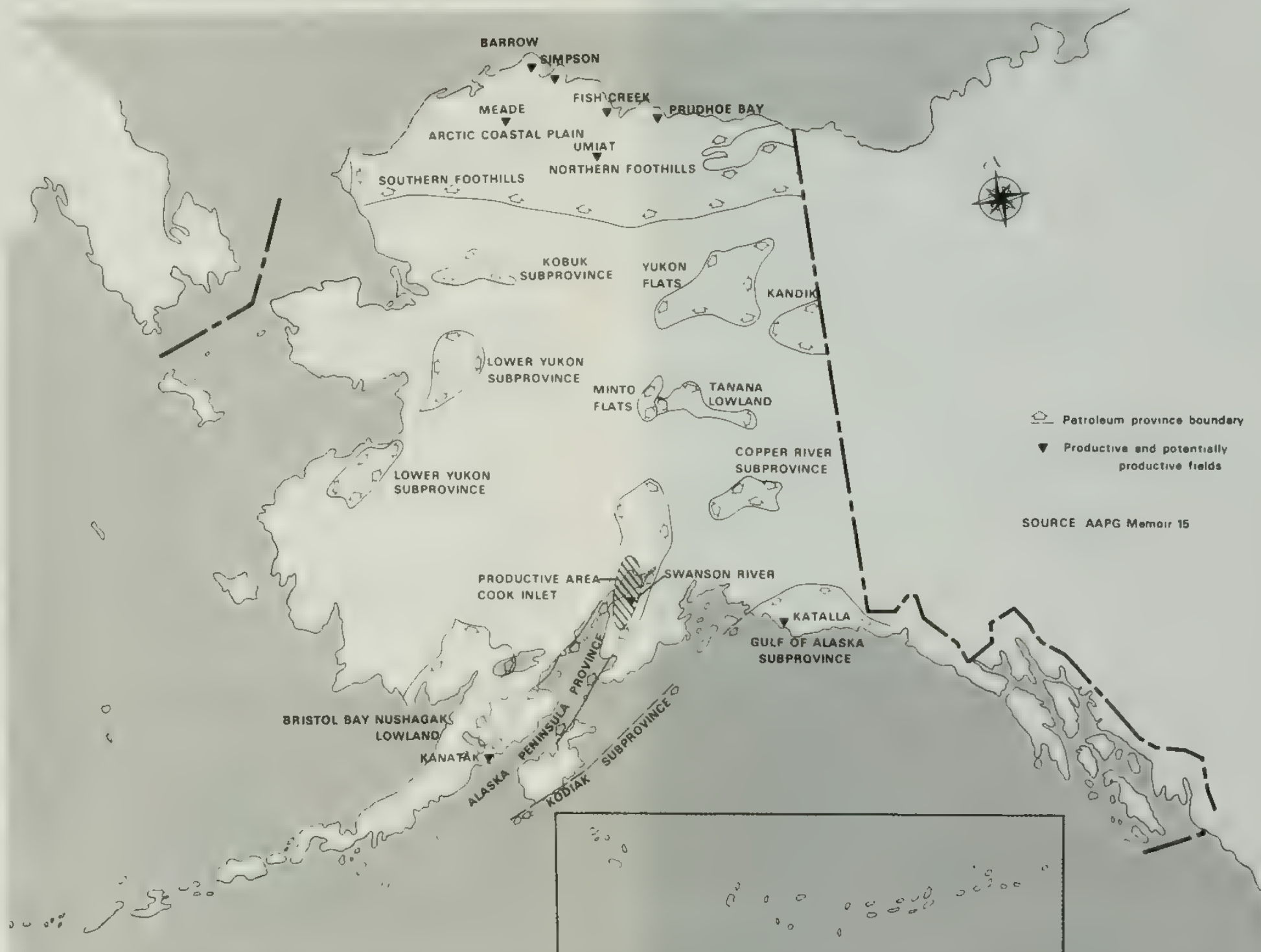
TABLE 11
MINERAL PATENTS WITHIN THE MOUNT MCKINLEY REGION

Meridian	Township	Sections	Acreage	Patent Issued
Fairbanks	13S 15W	36	71.0	4/26/63
Fairbanks	16S 17W	4	20.7	4/14/14
Fairbanks	16S 17W	5,8	59.2	6/6/14
Fairbanks	16S 17W	8,7	41.3	6/6/14
Fairbanks	16S 17W	7	61.4	1/28/29
Fairbanks	16S 17W	7	79.2	9/9/26
Fairbanks	16S 17W	7	41.3	9/9/26
Fairbanks	16S 18W	10,15	40.5	9/9/26
Fairbanks	16S 18W	11,12	20.6	9/9/26
Fairbanks	16S 18W	11,12	39.1	9/9/26
Fairbanks	16S 18W	12	183.3	10/6/27
Fairbanks	16S 18W	11,14	19.2	11/24/28
Fairbanks	16S 18W	11	20.5	9/9/26
Fairbanks	16S 18W	12,13	20.6	4/19/29
Fairbanks	16S 18W	13,14	20.6	9/9/26

Totals are as follows:

Mineral Patents	Acreage	Legally Located and Maintained Claim Groups	Acreage	Total Acreage
15	738	45	6,440	7,178

PETROLEUM PROVINCES



a probable potential of \$360 million in the region (USGS, 1972). Past production figures are unknown, but probably were not large (Berg and Cobb, 1967). Much of the area is under glacier, and not practical to develop. Purkeypile area and lands to the southwest of it on the north side of the Alaska Range in the Tonzona River drainage show high potential for base metals--silver and tin--with possibilities for lead, zinc and beryllium (USGS, 1974). A reconnaissance geochemical study was made by the U.S. Geological Survey in 1967. Exploration by industry is currently underway (USGS, 1974).

Nonmetallic minerals, notably limestone and shale, suitable for the manufacture of portland cement, mineral wool, or lightweight aggregate occur within the present boundaries of the park (Rutledge, 1953 and Warfield, 1972). Some of these minerals are easily accessible from the Alaska Railroad or Anchorage-Fairbanks highway.

Massive sulfide deposits north of Shellabarger Pass near the west boundary of the proposal were discovered in 1967. Copper (1-1.5%), zinc (0.8-1.7%), silver (0.9-2.4 oz/ton), and lead (less than 0.5%) deposits were mapped. Regional geological mapping has not been done beyond the area of this discovery (Reed and Eberlein, 1972).

The southeastern boundary of the proposed park lies on the northern edge of the Cook Inlet Tertiary Province (Miller et al, 1959), which has known petroleum reserves in the southern portion but has been little explored in the northern portion.

The Minchumina basin (Miller et al, 1959), lies in the northwestern portion of potential of this inferred basin.

Coal-bearing rocks of the Nenana field (Healy-Suntrana area) occur adjacent to the north boundary, both in and out of the existing park.

No additional coal lands of the Nenana field appear included in proposed park additions. Resources of the total Nenana field are estimated by the Geological Survey at 6.9 billion tons. The reserves immediately inside and outside the existing park (12 million tons) constitute less than 0.10 percent of the estimated total coal reserve in Alaska. Heating value of the coal, which is subbituminous, averages about 8,4000 BTU's per pound on an "as received" basis.

11. HYDROLOGY

Flowing from all the large glaciers within the park are braided streams with waters milky from glacial silt. A score or more of intermingling channels may flow in river beds some over 2 miles wide, below various glaciers. Glacier-fed streams are commonplace within the existing park and especially within the proposed additions. The most important rivers that head in this portion of the Alaska Range include the Tonzona, Foraker, McKinley, Toklat, Teklanika, Savage, Chulitna, Kahiltna, and Yentna. Clear streams, fed primarily from snowmelt, contrast to their glacially-fed counterparts and occur sporadically throughout the area.

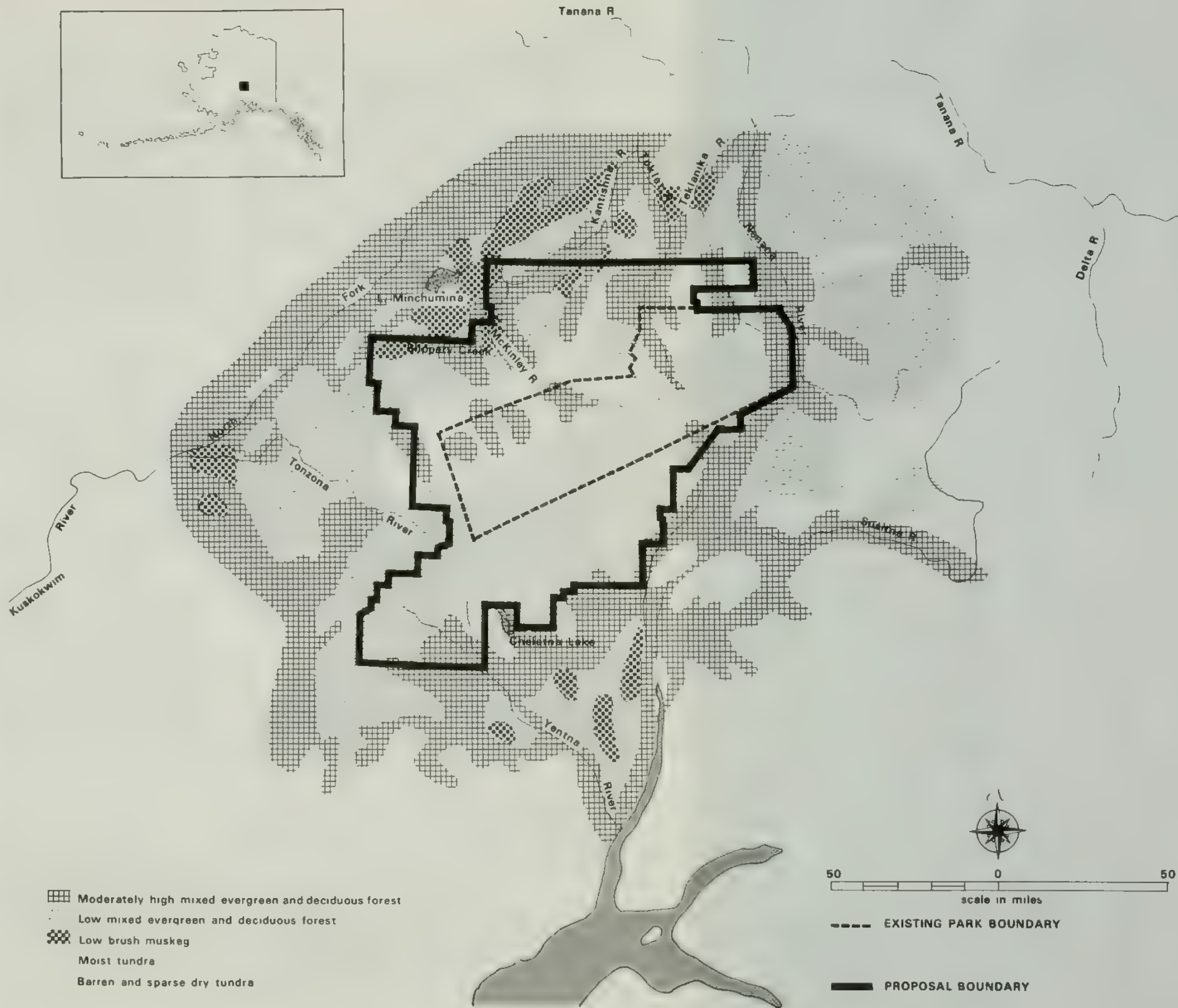
The following information is from a 1970 U.S.G.S. study of the water resources at the present park:

Water resources investigations at several sites in Mount McKinley National Park, Alaska were made by the U.S. Geological Survey. A new 8-inch well at Teklanika campground was tested in June 1969. The well should yield 50 to 75 gpm (gallons per minute), which is adequate for anticipated water requirements at the site. Two shallow 2-inch wells were jetted along a small stream in the Wonder Lake area. The results of test pumping these wells suggest that 15-20 gpm of ground water are available.

VEI



VEGETATION



- ▦ Moderately high mixed evergreen and deciduous forest
- ⋯ Low mixed evergreen and deciduous forest
- ▨ Low brush muskeg
- Moist tundra
- Barren and sparse dry tundra



Adequate supplies of good quality ground water are presently available from fluvial deposits at Toklat, Sanctuary, and Savage campgrounds. Additional supplies may be developed at these sites. Ground water of satisfactory quality and quantity can also be obtained from similar deposits at Igloo campground. Development of deep ground water in the Park Headquarters and the McKinley Park Hotel - Alaska Railroad areas from bedrock has been unsuccessful. Surface-water and shallow ground-water sources will probably continue to provide adequate water supplies to facilities there (Zenone, 1970).

Because of glacial gouging and moraine formation many large, deep lakes would be expected in glaciated country such as this. However, within the McKinley region there are only two such lakes. Wonder Lake, nearly 3 miles long, is within the existing park boundary north of the Alaska Range. Chelatna Lake, 7 miles long, is south of the range, within the Cooperative Planning and Management Zone. It is an excellent example of a large, deep, glacially-carved and moraine-dammed lake.

The availability of ground water within the northern foothills of the existing Mount McKinley Park is minimal due to permafrost. Frozen ground is impermeable to the subsurface flow of water, since ice fills the rock or soil pore spaces. However, ground water is present and available in the unfrozen alluvium at the large braided, glacial river valleys within the park.

12. VEGETATION

Comprehensive studies of the vegetation of the area are lacking. However, Viereck's (1966) studies near the terminal moraine at the Muldrow Glacier do offer information concerning plant succession and soil development for a climax tundra community.

Fires play an important role in plant community composition and development (Lutz, 1956). In general, fires within the boreal forest type are followed by a shrubby vegetation stage consisting primarily of shrub willows. Following the willow stage, aspen stands develop in upland areas on south facing slopes and paper birch is the common invading tree on east and west facing slopes. Both are usually replaced by spruces. (Viereck and Little, 1972).

Low productivity of plant life is characteristic of this region of short (30 to 75 days), cold growing seasons. Factors limiting growth of plants in the region are low temperatures and low availability of soil nutrients and water. (Billings and Mooney, 1968) Annual productivity barely exceeds the minimum necessary for survival and reproduction. Further, plants growing there are unusually sensitive to relatively slight changes in critical environmental factors and exhibit a strong negative response to any increase in them. Billings and Mooney (1968) suggest that tundra is, on an annual basis, less productive of vegetation than any other terrestrial ecosystem, except that of an extreme desert.

13. FAUNA

Large populations of native ungulates, together with their natural mammalian predators, constitute a primary resource of the area.

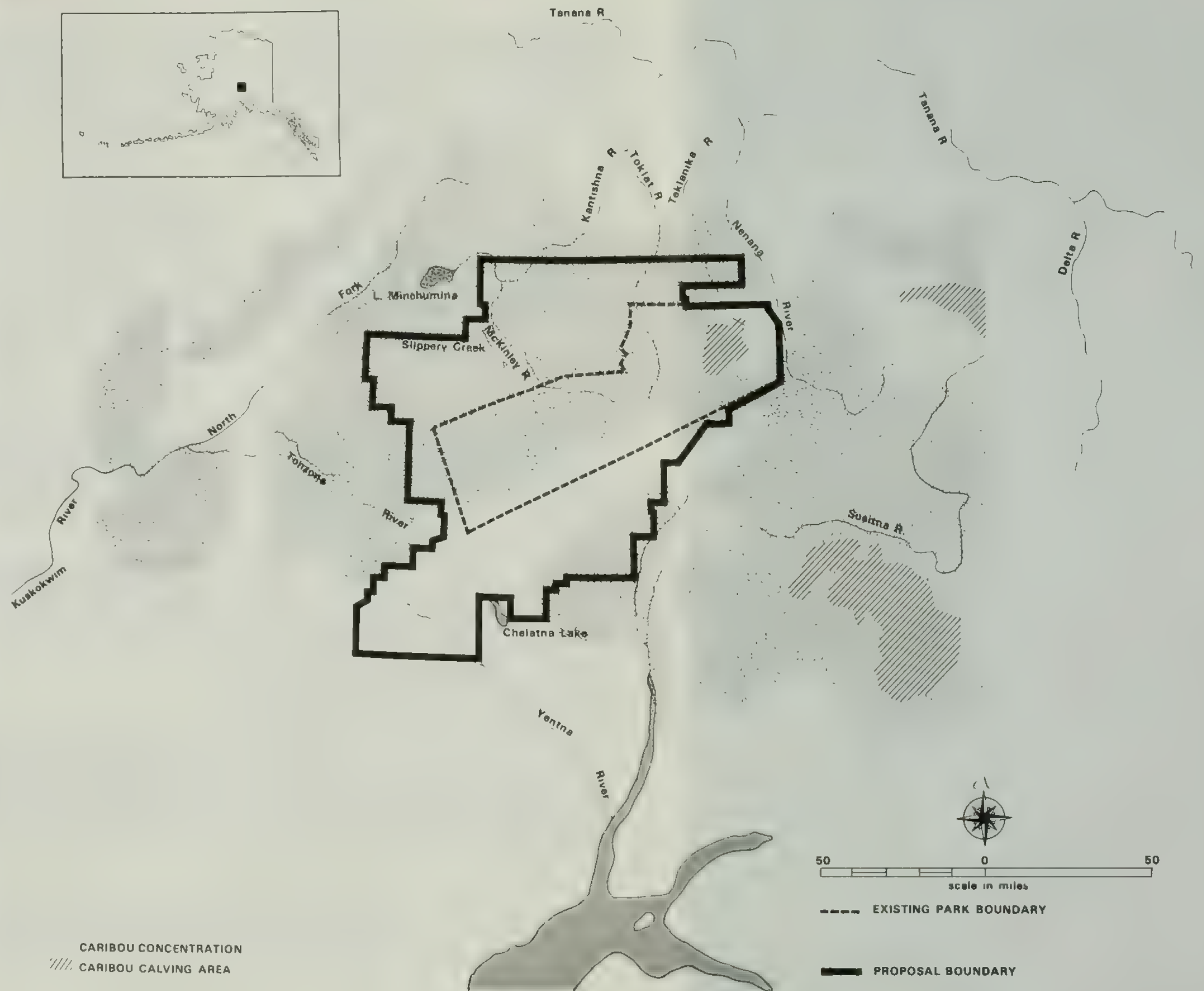
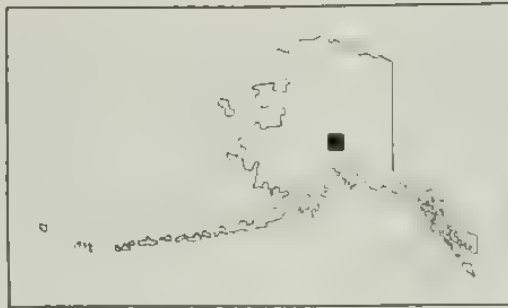
In addition, there is a diverse representation of bird and smaller mammal species representative of interior Alaska. Thirty-eight species of mammals, 1 amphibian, 11 fishes and 132 birds have been found in the region. (Appendix C)

Caribou are the most wide ranging mammal species in the area (Wildlife--Caribou Range map). They range from the hills and lowlands bordering the southeastern edge of the existing park to the

CAR

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CARIBOU



lowlands north and west of it; much of their summer range is tundra country within the park. Movements of the McKinley caribou herd are not completely understood but it is known that lowlands primarily outside the park comprise winter range essential for their survival.

Neither herd movements nor herd numbers are uniform from year to year due to natural fluctuations. Since 1941 herd size appears to have diminished to less than one-tenth of its former size. During 1972, ADFG biologist John Trent observed approximately 1000 caribou in the existing park. The Alaska Dept of Fish & Game estimates the 1974 population to be about 1000 individuals. Hemming (1971) sums up knowledge of the region's caribou:

The McKinley caribou herd of southcentral Alaska is relatively small at this time. Its population was estimated at 30,000 in 1941 (Murie, 1944), 12,000 in 1963 (Skoog, 1963) and limited observations in recent years suggest that the herd may now contain less than 10,000 animals.

This herd presently occupies an area of over 6,000 square miles extending westward from the eastern boundary of Mount McKinley National Park to the North Fork of the Kuskokwim River, northward to Chitsia Mountain and southward as far as Rainy Pass.

POST CALVING

Shortly after calving, cows and their new calves move over the Alaska Range between the Teklanika and Savage Rivers, to the area between upper Cantwell Creek and the west fork of the Chulitna River. This area has a long history of early summer use. (Alaska Game Commission, 1936; Murie, 1944, 1962; Skoog, 1968)

SUMMER DISTRIBUTION

In late June or early July, these caribou again cross

the Alaska Range and then swing west, parallel to the park road. This is a leisurely drift that leads toward the western boundary of the Park. Some animals turn north in the vicinity of Muldrow Glacier while others continue west along the foothills. In August and September only a few animals remain in the Park.

WINTER DISTRIBUTION

Records of the winter distribution and movements of the McKinley herd are sketchy at best, but by consolidating all available information a definite pattern becomes evident.

MAJOR HERDS

Prior to 1931, when the herd was estimated at over 30,000 animals, several widely separated winter ranges were utilized. Part of the McKinley herd wintered in the Broad Pass area south of the Alaska Range while the remainder utilized the hills and lowlands near Lake Minchumina and the northern Kuskokwim Mountains. (Brooks and Prindle, 1911; Riggs, 1920; Bone, 1923; Capps, 1927; Sheldon, 1930; Murie, 1944). From 1931 to 1961 winter movements were mostly north and west of the Alaska Range, centering in the Lake Minchumina area. (Alaska Game Commission, 1931; Murie, 1935, 1944; Skoog, 1968). Since 1962 the herd has not reached the Lake Minchumina area. (Murie, 1962; Prasil, 1968; Skoog, 1968). In recent years, caribou have wintered in the foothills between the Nenana and Kantishna Rivers and the foothills between the Little Tonzona River and Slippery Creek. Apparently, the latter area carries the greatest number of caribou.

SPRING MIGRATION

In spring, the animals move toward Mount

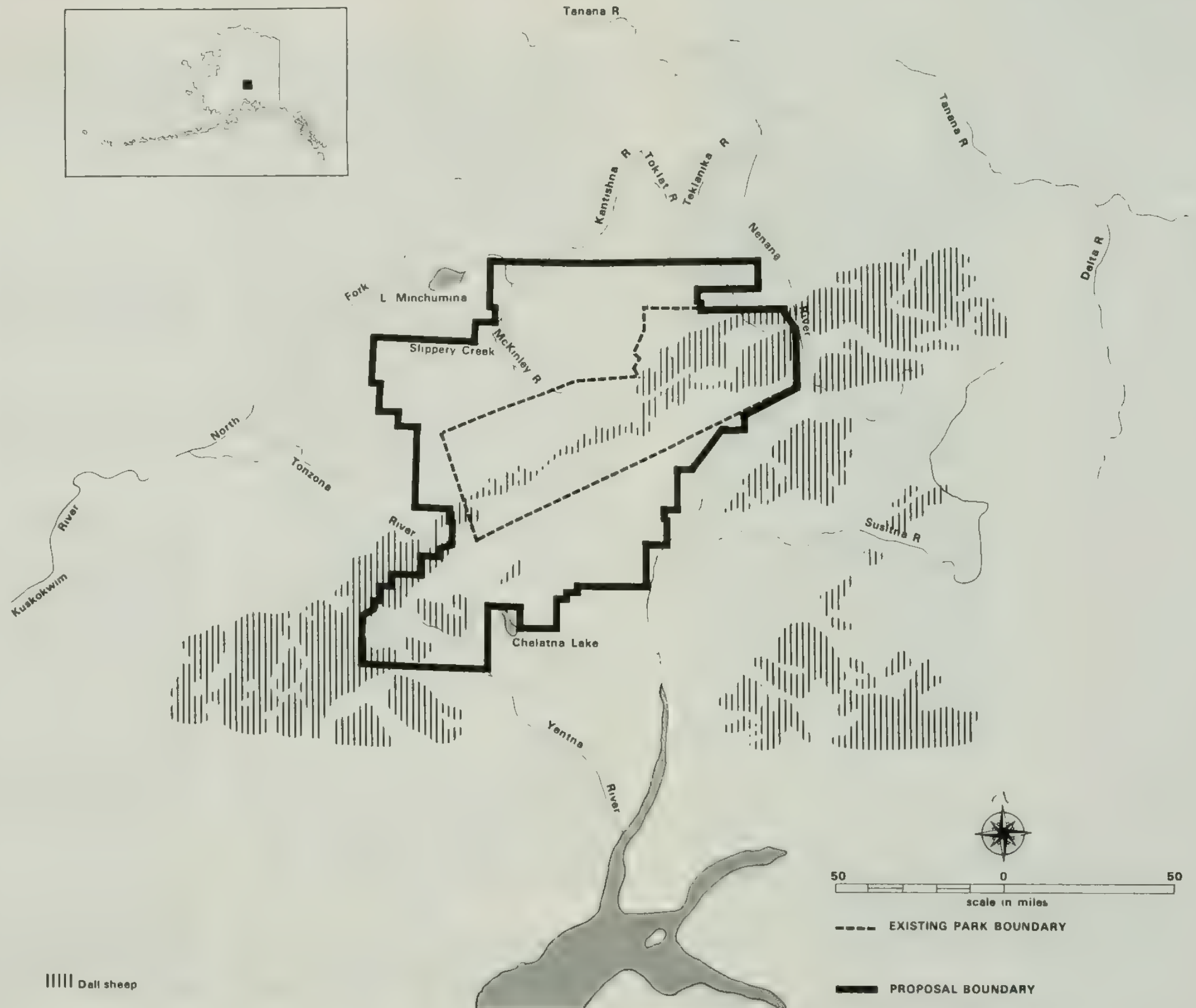
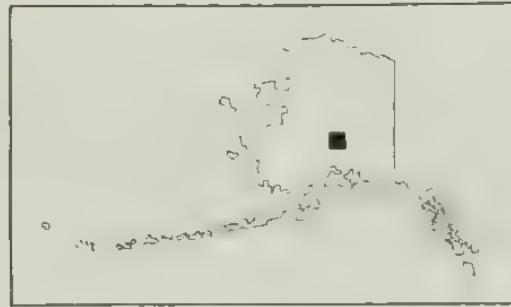


Northwest of the existing park is the taiga, winter home of the McKinley Park caribou herd and nesting area for a variety of waterfowl species.

SHE



SHEEP



McKinley National Park. Caribou that wintered to the southwest move northeast along the foothills, while animals that wintered north of the park move south along stream and river courses between the Toklat and Sanctuary Rivers.

CALVING

Calving has been observed as far west as the McKinley River, but normally cows move to the open rolling tundra between the upper Savage and Teklanika Rivers. (Murie, 1944; Skoog, 1968) Calving has been observed from 12 to 22 June, (Murie, 1944).

A rather isolated caribou group occurs south of the Alaska Range in the Happy Valley area, some of which trickle into the Yentna portion of the southern extension.

Dall sheep occupy steep tundra slopes and rocky areas of the Outer Range (a foothill range north of the main range) and lower elevations of the Alaska Range where suitable vegetation and escape terrain occur. (Wildlife-Dall Sheep Range map) Here, only the lower northern portion of the sheep range is outside the existing park. Haber (personal communication, 1972) estimates a population of 1,100 sheep in the existing park. The upper Tonzona River tributaries in the Alaska Range contain Dall sheep, which range partially within the proposed addition. ADF&G personnel surveyed sheep in the Tonzona River drainage in 1963. They observed 140 individuals, including 39 rams, 66 ewes, and 32 lambs (plus 3 uncategorized). Most of this drainage is outside the proposed extension.

Dall sheep also occur within and south of the park boundary southeast of Cantwell. Fifteen animals were observed on the slopes above Ohio Creek (northeast of Eldridge Glacier) in 1972. (personal communication Steenbergh, 1972) The total

number of sheep and the full extent of Dall sheep distribution and movements in this area are unknown, although ADF&G considers numbers not significant in this area. Observations of Dall sheep elsewhere in the proposed southern addition are lacking, except for portions of the Yentna drainage where occurrence has been noted. In the region, moose are usually associated with wooded lands and willow brush but also range upwards into open habitats where willows are abundant. (Wildlife-Moose Range map) Ponds and lakes which produce aquatic vegetation also support moose populations in the warm months. Except for small areas of rocky ridgetops, the entire lowland area north and south of the range is moose habitat. Open, protected valleys such as Sunflower Basin are important moose wintering areas. Moose density in Sunflower Basin (outside the proposed southern addition) in December 1972 was estimated to be greater than one animal per square mile based on observation by a National Park Service study team. Alaska Department of Fish and Game personnel counted nearly 500 moose in Sunflower Basin and surrounding drainages under poor to fair counting conditions in October, 1973. Moose population within the range of the Savage River wolf pack is estimated at 270 to 300 animals (Haber, 1972), though a detailed survey has never been conducted. ADF&G believes this population is at least twice these numbers.

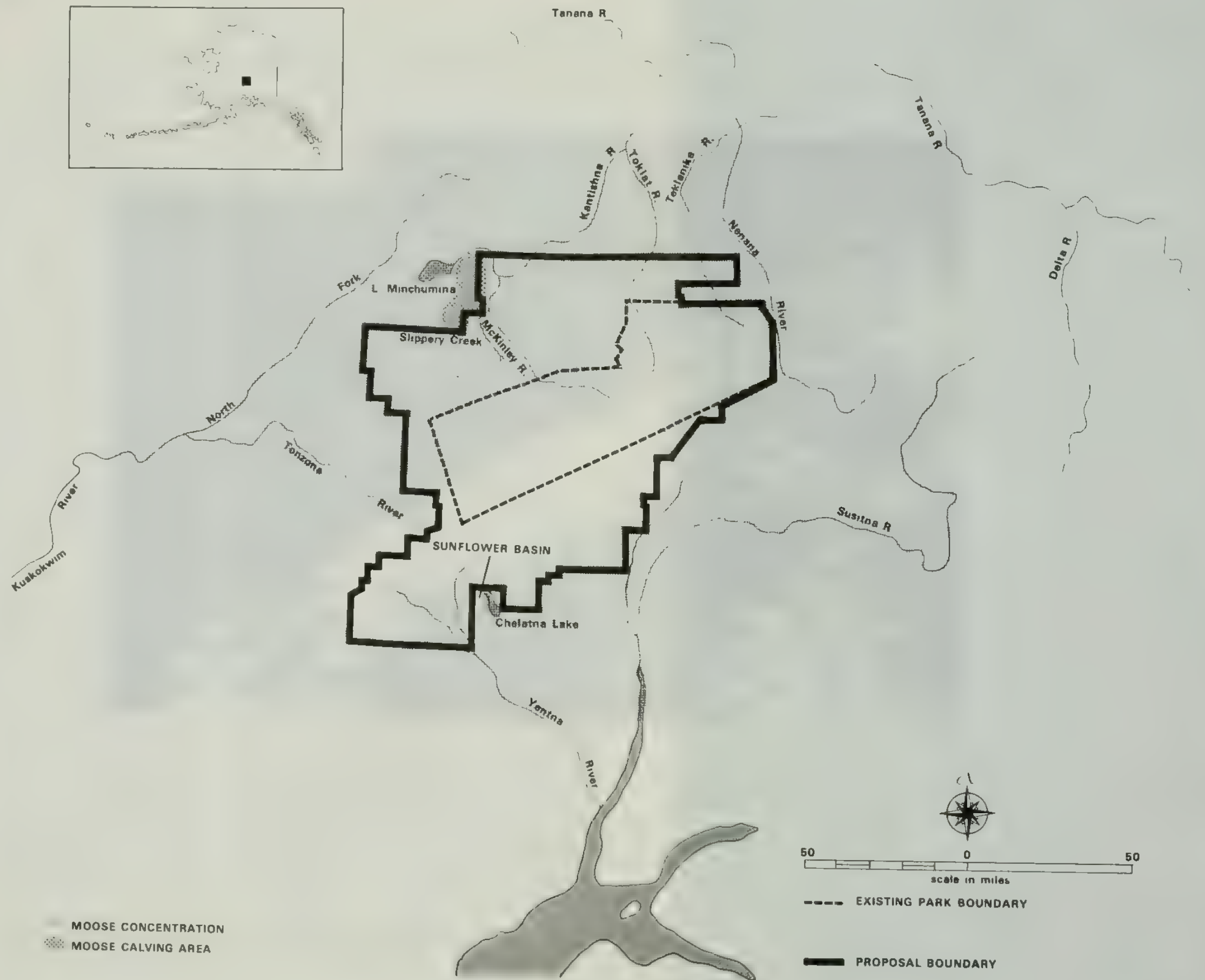
Moose move depending on conditions, and ADF&G estimates 1500-2000 in and adjacent to the western portion of the southern extension, any of which could move into the proposal on occasion (pers. comm., Kramer). Moderate numbers are believed to occur in the Yentna drainage. The area east of the Kahiltna Glacier supports poor populations.

Wolves are generally common in the north addition region according to ADF&G harvest data evaluation and trapper reports. They are

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MOOSE



wide-ranging, but favor stream edges.

The wolf depends for its survival upon the large native mammals of the area--caribou, moose, and Dall sheep. (Murie, 1944; Haber, 1972) Murie (1944) states that caribou were the main food of the wolves in Mount McKinley National Park, as well as over interior Alaska in general. Caribou and moose are of primary importance as wolf food, along with Dall sheep. Current ADF&G studies indicate that moose are primary prey and caribou secondary prey. Murie (1944) further notes that wolves also use several small animal species for food; ground squirrel, marmot, mouse, porcupine, ptarmigan, snowshoe hare, beaver, and occasionally red fox. Each wolf pack ranges over a large area, but the extent of travel varies with seasonal snow conditions and availability of prey. (Wildlife-Wolf Range map) Murie (1944) states, *"The East Fork wolves were known to move readily over a range at least 50 miles across."* Families denning in the northeastern section of the park are known to travel beyond the existing northern boundary and have been observed up to 11 miles north of that line (personal communication, Chalon Harris). About 10 animals comprise the Savage River pack which ranges over an area of 500 to 600 square miles. The Toklat River pack numbered at least 18 wolves in 1970 and ranges over about 1,000 square miles. (Murie, 1944; Haber, 1972) Wolves are known to be in other locations (Wonder Lake, Slippery Creek, Foraker River, Lake Minchumina) but their movements have not been studied. With the exception of the State lands in the northeast portion of the area, the proposed northern addition includes the entire known ranges of these packs. It is likely that wolves also occur within the proposed southern addition but, except for the presence of old dens west of Dunkle Mine in the Golden Zone, reports are lacking.

Grizzlies occur primarily in tundra and in the adjacent narrow strips of forest along streams.

They roam over the mountain slopes and valley bottoms in their foraging, and are occasionally found in small numbers in lowland areas. A significant portion of the grizzly diet is vegetarian. Their food habits change as the season progresses from roots in May and early June, to grasses during most of June and July, and then to blueberries and other berries during late July, August, and September. Ground squirrels form a small part of their food at all seasons, and carrion is always eaten when available. Ungulates are occasionally killed. On the lower Toklat it is known that grizzlies forage extensively for salmon carcasses in the late fall. ADF&G reports that a definite grizzly-salmon relationship exists within the north extension. Grizzlies in the area go into hibernation in October and emerge in early April. Mating occurs during May and June with birth occurring during hibernation. (Murie, 1944)

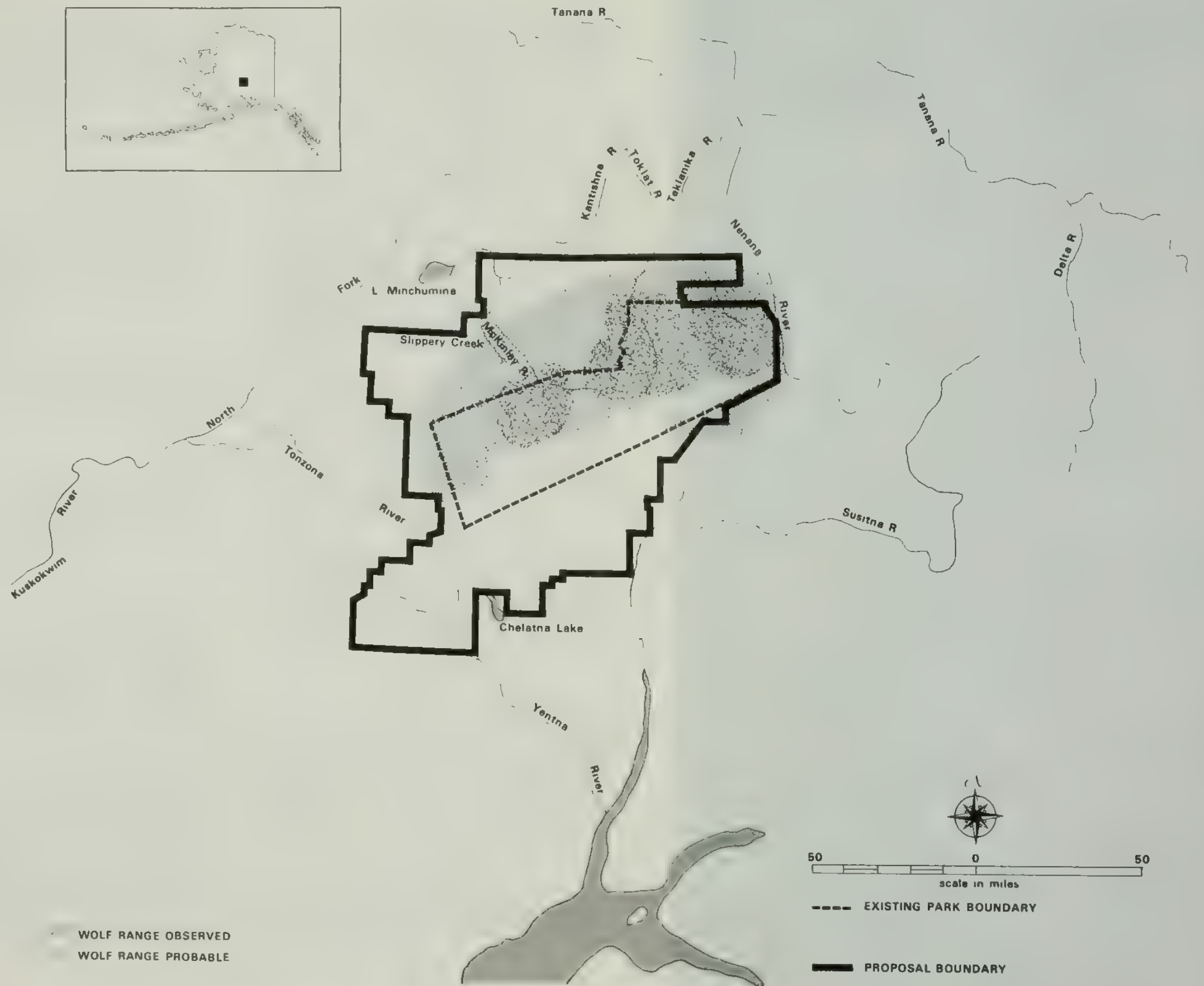
In 1944 Murie estimated a population of 50 to 75 grizzlies between park headquarters and Wonder Lake. Some of these animals range beyond the existing north boundary of the park where they may be hunted and killed. Grizzlies have been observed in the Kantishna area, within and adjacent to the western portion of the existing park. Some sightings have been made in the Lake Minchumina area. However, little is known concerning movements or total number of grizzlies present in those areas. Most grizzlies on the north side of the Alaska Range are light in color (Toklat type). Grizzlies also occur south of the Alaska Range, but numbers and distribution are unknown. Steenbergh (personal communication, 1972) observed grizzlies in Ohio Creek and the West Fork drainages of the Chulitna River, and several have been observed in Sunflower Basin and around Chelatna Lake. (personal communication, Reynolds, 1972) ADF&G reports their presence in the Yentna area, at least during spring.

Black bears occur primarily in densely forested lowlands, primarily in valley bottoms and along

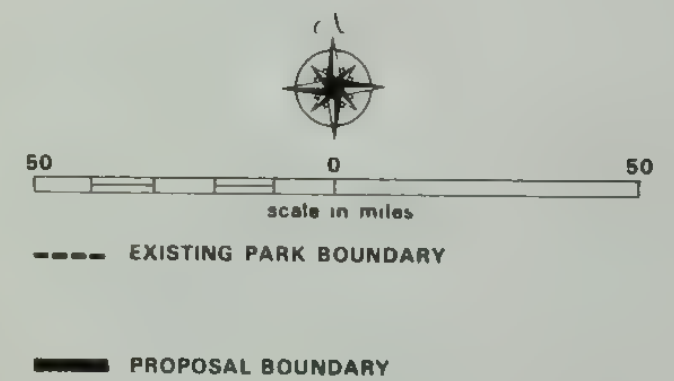
2



WOLF



WOLF RANGE OBSERVED
WOLF RANGE PROBABLE



rivers and streams (Murie, 1962) although a recent study indicates the species is not necessarily limited to forested areas. They are relatively rare within the existing park due to lack of such habitat. However, forested areas near the park are utilized by black bear. No population estimates are available.

Wolverines range throughout the entire area. Although accurate population counts are not available, Adolph Murie (1962) notes, "*The wolverine in late years seems to have become more plentiful in the park; nevertheless, it is always considered something special to see one.*"

Some Alaska Department of Fish and Game biologists consider a portion of the proposed northern addition and adjacent lands one of the most significant marten populations in the state. This species favors extensive undisturbed areas of forested country.

Birdlife is varied and abundant in summer. Most species found in the region are migratory--nesting here during summer and wintering in South America, lower North America, Asia, or the Pacific Islands.

Tundra slopes within the existing park and in the proposed additions are nesting grounds for many of these migratory species, such as the surfbird, wandering tattler, whimbrel, and long-tailed jaeger. Ravens, owls, and three species of ptarmigan are among the more than 30 resident bird species.

Lakes and ponds within the northwestern portion of the proposed park extensions constitute important nesting and rearing areas for migratory shorebirds and waterfowl that winter in the western hemisphere and, to a lesser extent, Asia. Each perennial lake and pond contains one or more families of ducks, teal, phalaropes, geese, or swans, including trumpeter swans. Loons nest at Wonder Lake and other bodies of water in the

northern lowlands. Thousands of sandhill cranes are observed during their spring and fall migration.

Bald eagles occur along the Nenana River, and have been seen around Lake Minchumina, but are not common. Golden eagles, however, are common throughout upland portions of the McKinley area. Gyrfalcons, though not numerous, are present. Murie (1963) says, "*One of the most reliable localities for seeing gyrfalcons is Polychrome Pass.*" The wandering tattler (a species of sandpiper) nests within the proposed expansion. Although the surfbird is not rare, its nest is rarely reported due to difficulty in locating it, in its high alpine habitat. Murie (1963), however, documents several surfbird nesting sites within the park.

The arctic warbler, while not endangered, is significant since it is one of the few birds of Asiatic origin which appear in North America. Murie (1963) notes its abundance in willow covered areas along the Toklat River and Igloo Creek, the latter area being the location of the first nests recorded in the New World.

The only species of amphibian in interior and northern Alaska, the wood frog, occurs in the park in marshland near Wonder Lake. It most likely would also occur in other similar habitats in the suggested northern additions but reports are not known.

Fish are not abundant relative to other Alaskan locations. However, some large lakes and ponds, especially Wonder Lake, contain lake trout and other species. Grayling occur in Moose Creek and other streams, although development of fry is hindered in silty streams. Lake trout, grayling, burbot, rainbow trout, red salmon, and whitefish are present in Chelatna Lake.

King, chum and coho salmon are found in Moose Creek, the Toklat River, Birch Creek and Hot Slough; kings and chums in the Bearpaw River;



Red Top Mine in the Kantishna Hills, with an intermittent history of operation and inactivity, is characteristic of most mining activity in the area.



Dall sheep occupy steep tundra slopes and rocky cliffs where escape terrain is present.



Grizzly bears occur north and south of the Alaska Range but appear to be more abundant north of the Range.

and kings in Slippery Creek. Many springs remain open in the northern extension area, allowing salmon to spawn until mid-December. Feeder streams are good for grayling. Occurrence of Dolly Varden is suspected (personal communication, ADF&G). Many upland lakes support northern pike and whitefish, while suckers, chubs and other species also occur.

14. LIMITING FACTORS AND POPULATION DYNAMICS

The northern extension in combination with the existing park contains a broad wildlife base, but productivity varies from poor to excellent depending upon environmental conditions.

The long-term productivity of both plants and animals is low in this harsh, subarctic environment; the margin of life is narrow. There are several factors contributing to the low plant productivity, but the most important is the length and severity of winter. Plants do not produce food during the long, cold winters and must depend upon stored nutrients for survival during at least 6 months of the year. Cold soils and highly intense, physical weathering processes such as frost churning operate toward low productivity, slow rates of soil formation and nutrient release. Nutrient recycling and decay rates are extremely slow or nonexistent (especially in permafrost), which complicates disposal of liquid and solid wastes.

An ecosystem is a conceptual term rather than a clear discrete entity. An ecosystem is a community of living organisms, interacting with one another, plus the environment in which they live and with which the organisms also interact. Thus it is a complete living system and the non-living physical environment with which it interacts. Depending on the scope under consideration, one may refer to the bacteria on the head of a pin, or all life on and surrounding the planet earth as the basis of

an ecosystem. More commonly, one refers to a pond, a forest, or a geographic unit bounded by significant barriers to movement, such as a mountain ridge crest, an ocean shore, or a large river. Ecosystems are open-ended, not totally discrete units, in that some organisms as well as physical materials and energy upon which they depend, may freely cross back and forth across any arbitrarily defined boundary.

For the animal populations in this severe environment food webs tend to be simple and food chains short. An unusual environmental event such as extreme snow depth, exceptionally low temperatures, fire, etc., which directly affects one or a few plants, may drastically affect the numbers of consumer species along the rest of the food chain. In part, this may be one cause for the pronounced fluctuations in numbers of some animal populations, such as lemmings, caribou, or snowshoe hares.

The migratory nature of many important animals periodically removes food resources available to resident species (predators and scavengers). Among both plants and animals, natural selection operates with efficiency-especially during the final months of the northern winter.

Effects of hunter selection favoring taking of larger-sized individuals in a population over a long period of time are not known.

15. SOILS, PERMAFROST AND RELATED FROST FEATURES

The Alaska Range is the dominant feature in the proposal area. The higher portions of the Range are bare rock and icefield (glaciers). Southeastward of the barren mountain areas thin layers of well-drained gravelly soil are overlain by a mat of partially to completely decomposed organic litter.

SOILS

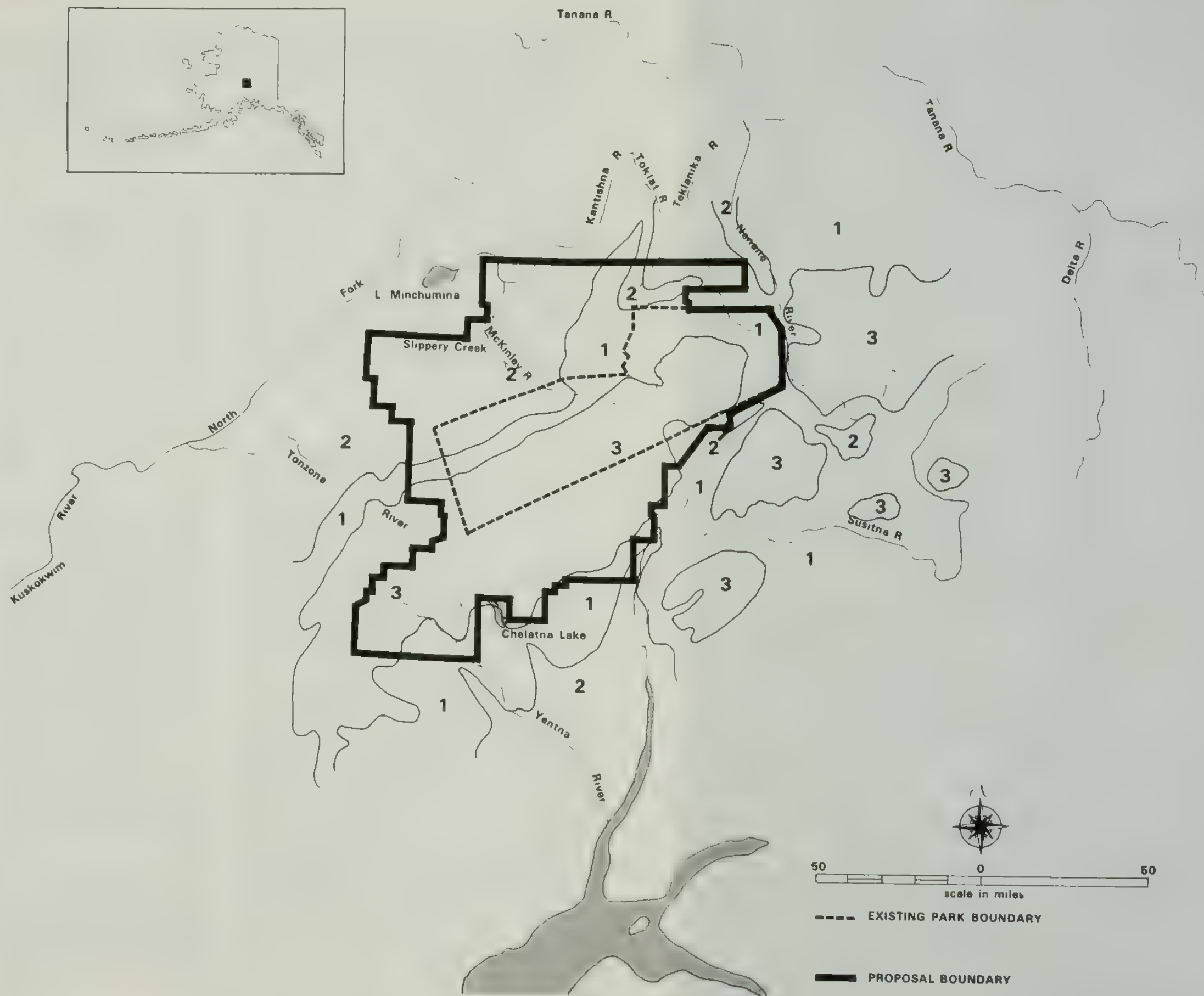
1. Well-drained with thin organic cover
2. Poorly-drained with thick peat cover
3. Rock and permanent icefield

This soils map is adapted from field sheets of the Alaska Exploratory Soil Survey prepared by the Soil Conservation Service, USDA. The map is released without editorial or technical review, and is subject to revisions. It is not an official publication of the USDA and may not be cited as such.

SOI

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SOILS



Most of the area of the proposed northern extension is composed of soils with textures ranging from gravelly to loamy, and is covered by peaty deposits of varying depth. Drainage is poor except in elevated areas; much of the area's soil is saturated most or all of the year. (See soils map.)

Permafrost (perennially frozen ground) is intermittently present throughout the lowlands areas north of the Alaska Range and is continuous in the higher elevations north and south of the range. Within the proposal area detailed studies to delineate the depth to permanently frozen ground have not been made. Wells, ditches, and roadcuts have encountered permafrost at depths of a few feet in some places. Generally, however, permafrost lies at greater depths. Exact permafrost thickness has not been determined, although thicknesses of up to 100 feet have been recorded near McKinley Station.

Tundra in the region occurs between 2,500 and 5,000 feet elevation (Vegetation map) and may be described briefly as treeless areas, beyond timberline, occupied by low herbaceous or shrubby vegetation, often with extensive mats of lichens or mosses. (Billings and Mooney, 1968) Dominant plants are dryas, heaths, dwarf willows, sedges, lichens, and mosses, plus numerous slow-growing annual and perennial flowering plants. Other communities of less widespread importance include gravel-bar, snowfield, and talus-slope plant and animal communities.

The lowlands (below approximately 2,500 feet) are primarily within the boreal forest (taiga), chiefly composed of white spruce locally mixed with Alaskan paper birch.

Black spruce, together with scattered larch, is common in poorly drained muskeg areas east and west of Wonder Lake, and balsam poplar is common along rivers. There are many variations

in plant distribution due principally to the uneven occurrence of snow, permafrost, soil parent materials, fire, and topography. Aspen occurs in limited areas, especially on burned-over sites. Paper birch, a major constituent of most forested lands in interior Alaska, is dominant nowhere along the margins of larger rivers, and stands are even less dense in relatively well-drained lowlands. Species composition of understory vegetation is similar to tundra, except that sedges are less abundant. Lichens, mosses, ericaceous shrubs, and dwarf birch are conspicuous components of understory cover. Some groups are especially important food and cover plants for mammals and birds. Lichens are a principal constituent of the caribou's winter diet, along with dwarf shrubs and sedges, while berries are important for numerous wildlife species.

Permafrost generally occurs at shallow depths where a thick vegetation mat insulates the ground surface against summer radiation. Any activity which alters the vegetative cover will alter the permafrost regime. For example, when insulating vegetation cover is removed, the permafrost level is lowered resulting in improved drainage and higher summer soil temperatures. Conversely, an increase in vegetative cover brings permafrost closer to the ground surface. (Viereck, 1966; Viereck, 1970)

Permafrost near the ground surface supplies water to vegetation during the growing season when rainfall is often insufficient for optimum plant growth. This is accomplished by seasonal melting of ice of the upper portion of the frozen ground.

Permafrost poses problems for solid and liquid waste disposal. Decay rates in frozen ground are extremely slow. Frozen ground also is impermeable to subsurface flow of fluids as ice fills all rock or soil pore spaces.

Permafrost demands special construction

techniques for roads, buildings, or other structures. Cuts or excavations in permafrost ground can cause repeated slumping through thawing, gravity flowage during thaw cycles, and heaving during freezing periods.

On moderate slopes melting of frozen ground results in mass wasting of slopes which often creates small lakes behind ridges formed as the water saturated soil slumps. Rock or earth stripes form on steep slopes.

Net results of freeze-thaw processes are: (a) disturbance of vegetative cover (e.g., tilted trees or "drunken" forest terrain or forested slopes); (b) churning of soils and downslope movement of soil mantle; (c) partial sorting of soils (e.g., separation of rocks from silt).

On flat to gentle slopes, rock and ice wedge polygons occur above permafrost ground. The ice wedge polygons are formed by ice, which melts, but cannot seep into the ground because of the permafrost condition. Thaw lakes may be present where silty soils are thick and drainage is poor.

Features created by downslope movement of water-saturated soil are common on the northern slope of the Alaska Range, the Outer Range, and the Kantishna Hills. Ice wedge polygons are relatively uncommon. The most extensive area of polygons lies beneath dwarf birch tundra in the valley west of Healy. Rock polygons floor many shallow ponds west of Wonder Lake.

16. FOREST RESOURCES

The treeline in the region varies from about 2,200 to 3,000 feet above sea level. The principal forest species are white and black spruce, paper birch, balsam poplar, quaking aspen, larch, and willow. Species composition is uniform over large areas but certain species are locally dominant. Paper birch, a major constituent of most interior Alaska forested lands, is not abundant in the region but

forms significant stands in the northernmost portions of the proposed northern additions.

Quaking aspen occurs principally on well drained uplands in small scattered stands mixed with white spruce. Dense stands of white spruce are found principally along banks of the large rivers. Less dense stands of spruce occur on relatively well drained lowlands.

Balsam poplar is mainly restricted to gravelly river bottom sites. Poorly drained areas contain muskegs where black spruce is dominant.

Within the southern one-half of the park, forests are estimated to cover less than 5 percent of the total area. Composition there is approximately 4 percent white spruce-white birch and less than 1 percent black spruce, aspen, and balsam poplar. Within the northern portion of the expanded park, forests cover about 75 percent of the land--65 percent of this forest is black spruce, with scattered larch; 5 percent white spruce; and 5 percent of other types (aspen, white birch, balsam poplar).

The proposed northern extension includes a portion of an area inventoried by the Forest Service in 1973. About 160,000 acres are proposed for inclusion from this area. Of this acreage, about 19,000 acres are of commercial size carrying 20 million cubic feet of wood volume. Another 6,400 acres is in non-commercial forest stands, but carrying more than 800 cubic feet per acre. Volume in these non-commercial stands totals 8.5 million cubic feet. (USFS, 1974, Section IX)

17. AGRICULTURE

Just to the south of the Mount McKinley region is the Matanuska-Susitna Valley, the major agricultural area of Alaska. High transportation

costs, climatological conditions, and lack of innovative processing, storage, and marketing techniques confine agricultural sales to local and military markets. (Federal Field Committee for Development Planning in Alaska, 1971) The U.S. Department of Agriculture, Soil Conservation Service, has identified the Toklat River-Kantishna Hills area, in the extreme northwestern part of the proposal, as having agricultural potential. At present, no agricultural use of these lands is occurring.

18. POWER RESOURCES

The Federal-State Land Use Planning Commission's resource planning team, the Alaska Power Administration, and the Corps of Engineers indicate that there are a number of locations presently identified for possible electrical power production dam sites in the region. (Potential Dam Sites map)

The only sizeable power development in the region is the Healy steamplant of Golden Valley Electric Association (GVEA), which supplies power to the Fairbanks area and a number of other Tanana Valley communities. The remainder of the region now depends on isolated diesel-fired generators.

At the request of the National Park Service, the Golden Valley Electric Association is developing plans to extend electric service from Healy to Mount McKinley Village and the park headquarters. A further extension to serve the village of Cantwell also appears feasible. It is reasonable to expect electric service will be extended from present utility systems serving the Anchorage-Palmer area into the Susitna Valley portion of the region as demands make such service economical.

There are a number of studies showing that electrical interconnection between the Anchorage

and Fairbanks areas is a very desirable element of long-range power systems development for Alaska. A route generally paralleling the Alaska Railroad appears probable, but precise location studies have not been made.

The most likely areas for hydroelectric power production developments are those on the upper Susitna River at the Devil Canyon, Denali, Watana, and Vee sites. These projects are considered by the Alaska Power Administration to be among the most important potential hydroelectric projects in Alaska. There are active studies and proposals, both Federal and State, for early development of the upper Susitna hydro resources and a major electric intertie between Anchorage and Fairbanks.

Six additional potential electric power production sites on the Chulitna, Susitna, and Talkeetna Rivers are considered by the Alaska Power Administration as not presently feasible for power purposes because of their small size and potentially excessive development costs. The APA indicated, however, that future multi-purpose objective studies may indicate feasibility for other purposes, such as flood control. These six sites are the lower Chulitna, Tokichitna, Whiskers, Lane, Gold, and Keetna rivers.

Two additional sites north of the present park boundary, Wonder and Teklanika, no longer are considered to have any significant value for power purposes, and action is underway to eliminate their withdrawals (personal communication, Alaska Power Administration, 1972).

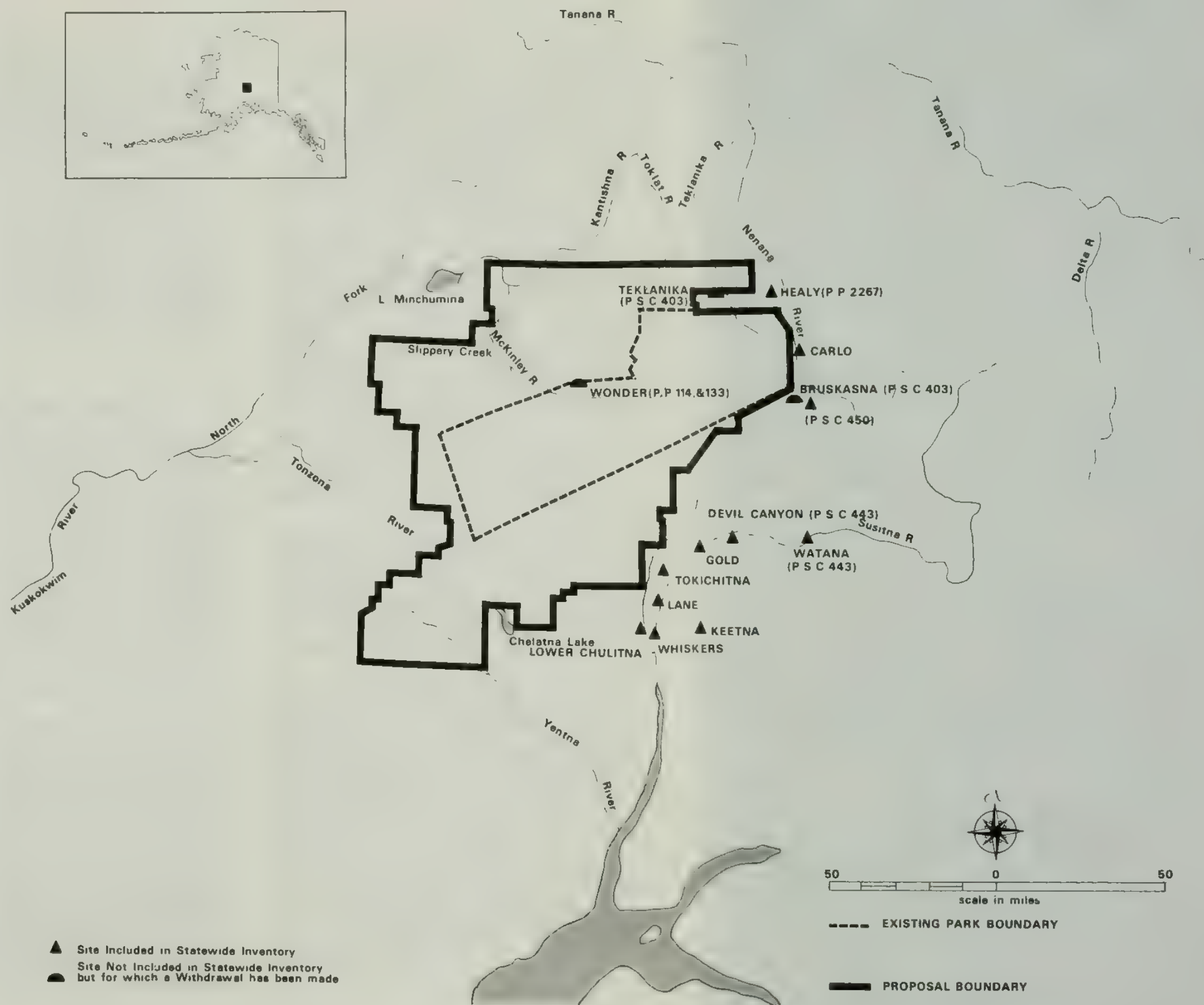
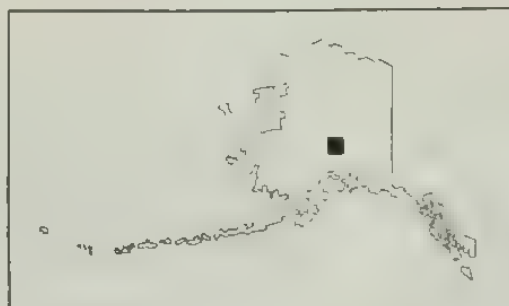
The Statewide hydropower inventory identified three units of a potential Nenana River system, namely the Bruskasna, Carlo, and Healy Projects. There are existing withdrawals for power purposes for two alternate plans for the Bruskasna site, and one for the Healy damsite.

The Nenana system does not appear justifiable as

POW

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POWER SITES



a single-purpose hydroelectric development in view of other resources and developments that would be affected, and the relatively high cost. Studies to define potential multiple use benefits have not been made, but it appears likely that the Bruskasna site could have considerable value for storage and regulation of basin flows with or without downstream development for power. For Bruskasna the upstream site (PSC 450) is considered more favorable than the lower site (PSC 403). It is anticipated that the current powersite review program (APA and cooperative agencies) will result in eliminating the lower site.

19. ARCHEOLOGY AND HISTORY

The history and prehistory of the areas surrounding the proposed additions to the Mount McKinley National Park are known from a few archeological investigations, accounts of early explorers and travelers, and documents. The upper Kuskokwim and the Tanana River basin were used and occupied by several Native groups. The high mountain areas were not hospitable, and were probably sparsely populated by man. In those areas large game animals, the principal food source, were widely scattered. Consequently, the Native inhabitants were migratory, leaving relatively few archeological remains.

Within the Mount McKinley region under study there are archeological sites at Lake Telida and at Lake Minchumina (including the Briches site excavated in 1962 and 1966). Another archeological site is a game lookout on the bluff overlooking the Teklanika River near the Teklanika campground in the existing park. A permit for exploration and investigation of the Dry Creek archeological site on the boundary of the proposed northern extension near the Anchorage-Fairbanks Highway, was applied for by Dr. Roger Powers and Charles E. Homes, University of Alaska, Fairbanks. Although dating

of artifacts is speculative, this is a potentially very important site. For the most part archeological investigation in the region has been confined to non-comprehensive surveys in the existing park. (West, 1961; Morris, 1963; Treganza, 1964) In 1970 West conducted surveys in the park, but the results have not yet been published.

The recent history of Native peoples in the Upper Kuskokwim region is briefly described in *Alaska Natives and the Land*. (Federal Field Committee, 1968; including citations to Oswalt, 1963)

The population and places of four major Alaska Native ethnic groups occupied the Upper Kuskokwim region. Never an environment of great biological carrying capacity, it was sparsely settled at the time of historic contact and is today. Furthermore, the region was an area of ethnic mixing--between Eskimo and Athapascan--and of Ingalik, Tanaina and Tanana Athapascans.

Dominant in numbers were the Ingalik who existed in this region in two identifiable subgroups, the Georgetown group and the McGrath group. Their places of settlement in this region for the former were about Georgetown and the latter about McGrath.

Additionally, there was Eskimo intrusion into Ingalik territory before the time of historic contact (1842) up the Kuskokwim River at least as far as Sleetmute. Initial contact was possibly along the river above Kalskag. At the time of early Russian contact the two groups were living together in relative harmony. Similarly, other groups entered the region--Tanaina from Cook Inlet by way of Iliamna Lake and Lake Clark to the Lime Hills country and Tanana by way of Tanana River tributaries to Lake Minchumina. Possibly, too, Koyukuk people crossed the lower Kuskokwim River drainage to ultimately mix with the McGrath Ingalik.

The upper Kuskokwim River drainage was not attractive to the early Russian explorer-traders, the greatest penetration being made by Zagoskin to Vinasale and the mouth of the Takotna River in 1844. In 1830 their initial ascendancy up the upper Kuskokwim River was met by hostility, but some friendships were made--enough to permit the establishment of a trading post in 1832 on the west side of the Holitna River at its junction with the Kuskokwim River. It was soon abandoned due to its inaccessibility to central river people, and a successor post was built in 1833 at the small Eskimo-Ingalik village of Kwigumpainukamiut at the junction of the Kwik and Kuskokwim Rivers. It, too, was succeeded by a third and last Russian post built in 1841 diagonally across the Kuskokwim from the Kwigumpainukamiut village. In honor of Alexander Kolmakov this settlement, blockhouse and barracks of Russian administration was named Kolmakov's Redoubt.

This Russian period of influence on settlement patterns along the Kuskokwim was only transitory...the upper Kuskokwim River reaches were virtually unknown and certainly little understood in any scientific sense until the 1890's and the advent of the Gold Rush and geological exploration.

In 1889 Densmore, with a party of prospectors, passed from the Tanana to the Kuskokwim descending to the Yukon Portage; in 1898 the geologist Spurr crossed the Alaska Range from the east and traveled down the South Fork to the main stem of the Kuskokwim River which he descended; in 1899 Lieutenant Herron crossed the Alaska Range near Rainy Pass and descended the South Fork of the Kuskokwim to Nikolai Village, then visited Indian villages at Telida and Minchumina Lake. (Federal Field Committee, 1968)

The Native people around Nenana and areas southward toward the Alaska Range constitute

another segment of the Tanana Athapaskan people. The following discussion taken from *Alaska Natives and the Land* (Federal Field Committee, 1968), includes material from Ales Hrdlicka (1943):

The Tanana and Nabesna Indians originally occupied all of this region--the Tanana River drainage with some Tanana villages on the Yukon River just above and below its confluence with the Tanana River and with a settlement at Minchumina Lake in the upper Kuskokwim River drainage. Both groups were of the Athapaskan linguistic group.

The first white contact with the Tanana people was with Russian traders, about 1860, from the lower Yukon followed by Hudson's Bay Company employees shortly thereafter. Not until 1885 was there any scientific exploration of the region with the passage down the river by Lieutenant Henry T. Allen, U.S. Army; initial geological and geographical work was done in 1898 by A. H. Brooks. The Nineteenth Century record on the region is, therefore, very hazy.

The native population of the Tanana has always been remarkably scarce. Early estimates (Dall) were about 150 families, and Petroff in the 1880 Census thought they numbered perhaps seven or eight hundred. Whether or not these estimates are reliable is doubtful, however, since the scarlet fever epidemic of 1868 must have taken quite a toll among the Tanana as it did with the Kutchin.

In any event the written record from the 1880's on does not indicate many Native places.

The Tanana people were great traders, and their village of Nuklukayet (present-day Tanana) on the north bank of the Yukon River just below its confluence with the Tanana River was a meeting and trading place of the Tanana, Kutchin and Koyukuk people.

With the advent of the Gold Rush period Tanana Natives gradually left their small places upstream on the Tanana River and inland on its tributaries to participate in the cash/barter economy offered them in supplying food for the prospectors who entered the region, servicing steamboat wood requirements, and offering furs for that expanding market. This movement made the larger downstream places on the Tanana River and about the Tanana-Yukon confluence grow in size and, subsequently, attract government postal and education services.

Native people at Cantwell moved to that location along the railroad in historic times, probably from the vicinity of Denali, some 50 miles to the east along the present Denali Highway. The people were traditionally nomadic-hunting, fishing, and trapping. They have cultural and kinship ties with the Ahtna people of the Copper River Valley, the Tanana people to the north near Nenana, and the Tanaina people of Eklutna to the south (Ahtna, Inc., 1973).

Presently, no archeologic or historic sites within the proposal appear on the National Register of Historic Places. However, the following sites or structures may be suitable for such designation: archeological sites near the Teklanika River, Toklat patrol cabin, and Kantishna. The first two lie within the existing park and are protected. The log Toklat patrol cabin and associated log structures were stabilized in 1971 and are exhibited and interpreted as a historic structure. Kantishna, a boom-bust, now seasonal, mining camp established in 1905, lies directly north of the existing park boundary. Several historic structures in varying states of preservation remain. Interpretive potential at the mine and the town is high. Reported places historically associated with Native groups in the Mount McKinley region are listed in Appendix B.

Early climbing attempts to reach the summit of

Mount McKinley comprise one of the historical themes of the area. The north peak (lower of the two peaks) was first climbed in 1910 by Peter Anderson and William Taylor. Three more attempts were made before the summit of the south peak was reached by Walter Harper, Harry Karstens, Robert Tatum, and Archdeacon Hudson Stuck in 1913.

Another historical theme is the story of the establishment of Mount McKinley National Park. The naturalist, Charles Sheldon, was the first to study the biological resources of the area and in 1906 originated the idea of a national park to protect it. Eleven years later Congress authorized Mount McKinley National Park to preserve the wildlife and scenic grandeur of the area.

B. PROBABLE FUTURE OF THIS ENVIRONMENT IF PROPOSALS ARE NOT ENACTED

If these proposals are not implemented, the lands proposed for addition would be available for State selection, Native selection, or multiple use (non-park) management by other Federal agencies. A different conceptual master plan for the management and use of the existing park's resources would have to be developed and implemented.

Increasing visitation, confined in the existing park, would require strict limitation to protect sensitive resources. This could impede the growth of the tourist industry at fairly low levels. Healy, Cantwell and Talkeetna would probably experience some growth to provide increased tourist facilities. Improvement of the trail from Healy to Stampede and extensions to Kantishna would create increased pressure to upgrade and re-open the existing park road to private auto traffic.

State lands north of the park could be re-opened for homesite development. Although in many cases incompatible with scenic values, commercial, residential, and recreational strip development would continue along the Anchorage-Fairbanks Highway and would probably also occur along an improved Healy-Kantishna road. Other regional transportation corridors will be unaffected. There is some likelihood the recent vote to move the State capitol from Juneau will result in its relocation somewhere within the Borough, further accelerating the commercial, residential and recreational strip development between Anchorage and the new location. Development will create a loss of wilderness type recreational opportunities and cause more pressure on State agencies, other Federal agencies, and local governments to provide these types of recreational facilities.

There will be no reduction in hunting and trapping lands north and south of the park, and these activities will not be limited except by State Fish and Game regulations.

There would be no foreseeable effect on the geology of the area or most climatic factors. However, with an increase of large mining operations in the area, there would probably be a significant increase in air pollution.

Mineral development of the Kantishna and Stampede districts could take place without interference, and could lead to potential air pollution within the existing park. Mineral exploration in the existing park would also continue.

Vegetation would be unaffected, except in areas of development. Some non-commercial timber harvesting could occur on lands proposed for addition. Fire management policies would have the greatest effect on the vegetation of non-park lands.

The future wildlife populations and

interrelationships within the area would be affected. Out-ranging species of mammals, whose habitat is not adequately represented in the existing park, would be the most seriously affected. Of the birds, waterfowl would be the most affected should their nesting areas be utilized for recreation and homesites.

There will be no direct effect on permafrost and related features. Power resources will be unaffected, since there are no active power proposals located within the proposed additions. The needs for power will be affected little, if any.

III. ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

A. IMPACT ON WILDLIFE

Wildlife populations in the proposed extensions have significant national value because of the rich diversity of large mammals in one of the least altered ecosystems in the Nation. Carnivores (predators), omnivores, and herbivores (prey) presently exist in a dynamic interrelationship which is, relative to similar populations in other subarctic regions of the world, scarcely altered by human influences. Densities are low because of the subarctic climate, and populations and interrelationships are subject to significant disruption due to seemingly minor disturbances. The entire northern extension is suitable for various forms of wildlife habitat; approximately 20 percent of the southern unit is considered habitable. Populations of sport fish species are small, consisting primarily of grayling in clear streams and lake trout in deeper lakes. Little utilization of fish by man presently occurs, but it would be allowed to continue under this proposal.

Wolves are present in the proposed northern addition with densities of one animal per 50 to 60 square miles. The average range of a wolf pack in the area covers 500 to 1,000 square miles. The McKinley caribou herd, recently estimated by ADF&G at about 1,000 individuals, ranges over a 6,000-square-mile area, about two-thirds of which is contained within the present park and proposed north extension. Grizzly bears occur in tundra and upland brush habitats within both proposal units, with 50 to 75 individuals estimated between park headquarters and Wonder Lake. Moose are widely distributed in forested lowlands with an identified calving area at the northwest corner of the proposal. Waterfowl, including small numbers of trumpeter swans, and furbearers, including a noteworthy population of marten, utilize lower and wetter portions of the northern extension. Hunting within the proposed additions is primarily for caribou and is increasing for grizzly and moose. Hunting pressure on caribou, locally

significant, occurs in the Kantishna and Stampede areas adjacent to the present park boundary. Elsewhere in the proposal area hunting pressure is very light.

Although not proven through scientific observation, it is felt by some biologists that animal populations that are subject to hunting exhibit changes in genetic makeup because hunters select animals with certain characteristics (e.g. maximum size, largest antlers). The enlarged park will create large areas of typical interior habitat in which animals will not be hunted. In these areas, wildlife populations will become as nearly as possible naturally self-regulating, thus allowing for maximum diversity of genetic makeup, and providing a control population against which to compare managed habitats and populations. Addition of the area near Kantishna will significantly reduce present hunting pressure now occurring on caribou which range just outside the present park boundary.

To the extent that this proposal influences new road construction, potential impacts of road construction on wildlife would be lessened or removed. Such impacts could include increased hunting pressure, changes in movement patterns, and disturbance of critical activities such as bear denning, moose calving, or waterfowl nesting and molting.

New mineral exploration and entry is to be excluded both within the additions and the existing park. This action, along with the contemplated use restrictions on existing properties and their purchase whenever possible, would reduce present localized pressures on grizzly bears, wolves, and caribou. Exclusion of residential development, particularly around lakes, will help to perpetuate waterfowl populations. Protection of critical denning (carnivores) and calving (ungulates) areas will assure freedom for wildlife from man-caused disturbance, especially during

reproductive and rearing activities.

Public use increases may be expected due to heightened public interest in the proposal area, but close regulation of visitor activities will minimize impacts due to visitor caused disturbances.

Coordination of management of wildlife and habitat adjacent to proposed park boundaries is proposed. This coordination will be through cooperative agreements covering areas of ecological concern and the Cooperative Planning and Management Zone. A more orderly plan for land use can be expected to reduce pressures on species such as wolves and caribou, if agreements with State, Native, and other landowners are established. Overall adverse impacts on wildlife populations would be relatively minor and local. As a result of this proposal, a substantial impact will occur in terms of assuring perpetuation of regional wildlife populations.

B. IMPACT ON VEGETATION

Vegetation within the proposal varies from low river bottom forest to high alpine tundra, with the interface between forest and alpine tundra between 2,200 and 3,000 feet. In the proposed northern addition, about half the area contains moderately tall mixed evergreen (spruce) and deciduous (birch and poplar) forest, one quarter is moist to dry alpine tundra, and the remainder consists of low brushy communities and open tundra-like muskeg. The southern segment of the proposal is predominantly barren, containing only 5 percent forest and roughly 10 percent alpine tundra. Presence of permafrost and the short growing season, generally limited to 75 days, restrict productivity. Disturbances often have long lasting effects. The vegetative carpet comprises a mosaic, varying due to localized differences in fire history, topography, soil parent materials, permafrost, and snow depth.

Within the proposed additions a few trees are used each year for cabin logs and fuel. If these lands are added to the park such uses will be precluded, except for subsistence use by those customarily utilizing this resource.

Naturally occurring wildfires will be allowed to burn more freely than presently tolerated, leading to locally significant--though temporary--destruction of cover, and a mosaic more closely resembling that which would have existed in the complete absence of man.

A small-scale development is proposed at Kantishna, the site of a small, seasonal mining community. Impacts of development at this site would be minor. Access and visitor facilities, of a nature to be determined after study related to the proposed Cooperative Management and Planning Zone, could destroy individual plants. Similar localized minor impacts would result from increased visitor use, including trail and campground facilities, which are planned. Proposals for major developed public use sites, either within or adjacent to the south addition, will be subject to study and environmental impact statement preparation prior to their approval. (See next section.) Closure of the proposal area to mineral entry will result in limiting disruption of vegetation to that which now occurs locally.

An impact of moderate ecological significance would follow reduction of fire control. Impacts related to developments as proposed under the present plan will be minor.

C. IMPACT ON VISUAL INTEGRITY OF THE LANDSCAPE

Over most of the proposal area, visible remnants of the works of man are virtually nonexistent. At present, old cabins, mining equipment, and other evidences of sporadic mining activity, as well as Camp Denali, are found in the Kantishna and

Stampede areas. Certain of these remains, as well as the seasonal mining settlement at Kantishna, have historical interest, and could be stabilized or restored. Many of the other buildings and materials would be removed, thereby lessening intrusions to visual attractiveness of the landscape.

Approximately 25 seasonally-used structures exist, primarily within the proposed north unit in the Kantishna area. Elsewhere, only a few trapper cabins are known. The proposed exclusion of further mineral entry and acquisition of existing properties where possible would lead to removal of most visual clutter now existing around the above sites.

Moderate nonrecreational and recreational visitation occurs in the Kantishna Hills and the Peter Hills and is very light elsewhere. The proposed hostel at Kantishna will be designed to blend in with existing structures and to have the least possible impact on the visual character of the area. A backcountry development at a glacier on the south side including a campground, an interpretive facility, and trails primarily on open ground might be visible for long distances, and road rebuilding could lead to slumping and heaving due to permafrost melt; however, no major construction is presently contemplated.

Only limited developments are planned within the proposed park boundaries. Eventual private development of recreational facilities is likely along the south boundary of the park in the Cooperative Planning and Management Zone. If such development occurs, modes of access, accommodations, and other facilities are envisioned. These could produce major impacts on the landscape, particularly along access corridors and at developed sites. Developments could cause some erosion of the land, if foot travel and camping locations are increased. Developments constructed on tundra are visible for long distances, and before constructing any major

developments further study and preparation of environmental impact statements must be made.

It is the intent of this proposal to concentrate major development of new facilities in the zone of Cooperative Planning and Management, rather than inside the park boundaries. This would, of course, result in more intensive development within the zone, with resultant impact on the visual integrity of those lands. Efforts will be made, however, to lessen the significance of these impacts. Transportation facilities could have an increasing adverse effect on the visual integrity. Routes and borrow pits would be visible over long distances from vantage points. Within the cooperative zone, as well as within the park, effective consideration of locations and types of facilities would lessen the significance of such impacts.

Snowmobile and off-road vehicle use probably would be allowed within the cooperative zone. Such use would be regulated, and perhaps allowed only in certain zones. Heavy snowmobile use could compact thin snow cover enough to cause visible scars. And strictly controlled off-road vehicle use could cause furrowed strips, broken vegetation, and formation of gullies in certain locales. Removal of surface cover could create mud flows which would cover low vegetation. The resultant impact could be a significant but localized disruption of landscape.

Landscapes within the proposal are essentially natural, i.e. they have high visual quality. Impacts of the proposal on visual quality may ultimately be substantial at one or possibly more major development sites in the overall area. However, impacts within the proposed park extensions directly relating to the actions included in the proposal would occur on less than 1 percent of the overall acreage, and would be minor. Thus the primary impact of the proposal on the integrity of the natural landscape would be to preserve its

natural quality.

D. IMPACT ON AIR QUALITY

Existing air quality is high. The continued use of a public transportation system and exclusion of mineral entry, both proposed under this action, would hold the present minor stirring of dust and release of exhaust fumes to the low level at which they now occur.

The major developments possible within the Cooperative Planning and Management Zone could lead to localized release of pollutants. The overall impact of this proposal on air quality of the region would be negligible.

E. IMPACT ON WATER QUALITY

Streams flowing from glaciers usually carry heavy loads of silt. Within the proposal, some of these streams are two miles wide and carry enough silt to appear milky in color. Smaller streams, primarily on the lowlands, are fed by rain and snowmelt, and usually flow clear or stained by tannin from muskeg vegetation. In general, summer concentrations of suspended sediments run high, 500 to 2,000 milligrams per liter. Restricted, though locally plentiful, supplies of good quality ground and surface water are available. Exploration is generally necessary to develop ground-water supplies. Wells are moderately deep, with fair to good water potability.

Numerous pothole lakes occur in the northern portion of the proposed additions, but only two large, glacially carved and moraine dammed lakes exist within the area. One of these, Chelatna Lake, lies within the proposed Cooperative Planning and Management Zone. Expected use facilities at this site could moderately reduce quality of lake and

adjacent drainage waters. Intermittent permafrost occurs north of the Alaska Range and is continuous at higher elevations. Construction of the facilities envisioned under this proposal could cause disturbance of permafrost leading to siltation caused by transport of mud into streams following rains.

Locally significant reductions of water quality may occur within the proposed cooperative zone. The extent of such reductions will depend on the effectiveness of cooperative planning. Elsewhere, impacts are expected to be localized and minor in importance.

F. IMPACT ON LOCAL SOCIAL AND ECONOMIC CONDITIONS

The local and regional economies which will be discussed in this section refer basically to twelve communities in the vicinity of the park with a total population of 1,773. (See Table 2 in Chapter II for population breakdown.) Very little information is available to quantify the relative importance of employment in various sectors of the economy of these towns. In general, the communities rely on the combination of cash and subsistence economies. Subsistence uses have a varying degree of importance depending on the community; some rely heavily on subsistence, others have almost complete cash economies. (See subsection (1) of this section for detail.)

Since the completion of the Anchorage to Fairbanks highway in 1971, increasing numbers of people--recreational users, tourists, through travelers, seasonal residents, and businessmen--have been coming into the area. Traffic on the highway through the McKinley area jumped from 55,000 in 1971 to 306,000 in 1972. Recreational use in the park in 1973 rose 64 percent from 1972. This influx of people has created opportunities for increase of service industries such as motels and

service stations in towns along the highway. In addition to this rapidly expanding sector of the economy, mining has also played an important role in the region and continues to be a source of income and employment at a modest level. Government also provides small amounts of employment through schools, medical facilities, etc. To the south of the McKinley region lies the State's major agricultural area, the Matanuska-Susitna Valley. The specific impacts on these sectors of the economy will be discussed in the following sections.

In general, the proposal would concentrate most social and economic impacts to the east and south side of the park where most visitor use and development will occur. The overall impact on the market economy will be a relocation of tourist demand from a broad area along the eastern boundary and concentration in the area south and east of the proposed park. To the extent that an enlarged and improved park will attract more visitation, the local economy will experience greater increase in growth as a result. Lastly, since visitor facilities within the park will be limited, much of the increased demand for facilities will be handled by private enterprise, further stimulating growth. Thus, the proposed action could have a substantial impact on the economy of the local towns and the region.

1. SUBSISTENCE AND OTHER RESOURCE HARVEST ACTIVITIES

The importance of subsistence activities and harvests varies from village to village. Cantwell has a resident population of approximately 62 and an additional 35 Natives enrolled under ANCSA. The people rely partially on subsistence harvests, but also participate increasingly in the wage economy through employment with the Alaska Railroad, highway construction and maintenance, and tourist-service related industries. Except for some fishing in the streams to the southwest of the

village withdrawal (Ahtna, Inc., 1973), they are not known to carry out any subsistence activities within the proposed additions to the park. Trappers from Nenana are reported to be active on the Kantishna River within the proposal area (ACS, Bishop Comment). A few individuals living at Lake Minchumina and in the Birch Creek-Kantishna area and possibly a few others at scattered locations engage in subsistence pursuits, some of which may occur within the proposed north additions (ACS, Bishop comment, Collins comment). The people of Telida and Nikolai, with resident populations of 16 and 112 respectively, rely to a large extent on subsistence harvests. They have been fairly isolated from influences of the dominant society and the cash economy until recently. These people engage in fishing, trapping, hunting, and a little home gardening. Some hunting and trapping by people at Telida occurs in the proposed additions. It is possible that one or two trappers have lines in the lakes region northeast of Telida. Some residents of McGrath and Nenana have similar subsistence patterns to those of Nikolai and Telida, but these have not been documented.

The full range of subsistence use patterns and zones is not well documented and field study is required to determine the existing established uses and users. Such uses and users will not be affected by this proposal, as discussed in section I, "Legislative Proposal."

Provisions to close the proposed additions and the existing park lands to sport hunting, entry under the public land laws, mining and mineral entry, and other commercial exploitation of resources, including the potential to preclude development of a system of surface transportation would bring significant impacts for these subsistence users by excluding such uses which could damage subsistence resources and wildlife habitat, and disrupt local family, community, and individual lifestyles.

If new settlers in the area should wish to pursue subsistence activities within the park boundaries who have no previous record of uses in the area, as determined by field study, enactment of the proposal would prevent them from doing so. This would have an adverse impact on an unknown number of people.

Should availability of subsistence resources on other lands commonly used in the vicinity of these villages become reduced in the future, implementation of the proposal would prevent the people from redirecting their subsistence efforts onto the lands within the proposed park. This impact could be significant since some important subsistence resources, such as caribou are subject to fluctuations in numbers and range, and others such as moose and beaver experience year-to-year differences in distribution.

Existing trapping for subsistence purposes as determined by field study would be allowed in the park additions. However, commercial trapping would not be allowed. Continuation of such existing, established and documented trapping activity, and sale of pelts which enables a local resident individual or family to continue to maintain a subsistence lifestyle would be permitted. The ban on commercial trapping, however, would have an adverse impact on those who wished to engage in commercial scale trapping on proposed lands. Such activities would have to be relocated to other lands in the region.

If in the process of developing policies and subsequent regulations, as discussed in section I, "Legislative Proposal," some individuals' resource harvest activities are determined to be "sport" hunting or "commercial" trapping, those individuals would be adversely affected. They would be forced to hunt and trap on other lands in the area. While most local residents, both Native and non-Native are understood to be engaged in a subsistence lifestyle, there are some seasonal

residents, as well as others who come into the area from beyond the immediate region, Native and non-Native, whose resource harvest activities may not clearly be of a "subsistence" nature because of a dominant reliance on the market economy as a principal means of livelihood. For these people and future seasonal or transient residents the impacts would be important. The magnitude of this impact could increase in the future if more "urban-oriented" people sought to settle in the area in order to engage in a rural lifestyle. Their resource harvest activities would not be allowed in the proposed park.

In the short run, protection accorded to wildlife habitat and populations, and to all subsistence resources and the recognition of existing subsistence lifestyle provided by this proposal would have a significant impact in maintaining the options for present residents to continue to engage in a subsistence lifestyle. New settlers would be prevented from harvesting park resources for subsistence purposes.

It is possible that in some areas near the additions, such as the Lake Minchumina area, expected increased pressure from sport hunters would cause competition with subsistence users. The impacts on all resource harvesters would, under these circumstances, be significant.

2. SPORT HUNTING AND TRAPPING

Sport hunting occurs on some lands proposed for inclusion in the park, both north and south additions. The numbers of sport hunters using the area of the proposed additions is thought to be relatively small at present. The area around Telida is popular for sport hunting of caribou and moose, attracting some people from Anchorage. Sport hunting for caribou is moderately heavy in the area around Kantishna and along the Stampede trail just outside the present park boundary.

Moose and caribou hunting occurs at numerous locations accessible by foot or snowmachine or other all-terrain vehicles from the Anchorage-Fairbanks highway, as well as at locations accessible to float or ski-equipped aircraft. Game harvest data for the State's game management units which surround and encompass the proposed park indicate that hunting for caribou, moose, brown bear, and Dall sheep occurs throughout this wider region. The proportion of the kill obtained from lands proposed for addition to the park has not been determined.

Enactment of the proposal would expand the area closed to sport hunting. This would represent an adverse impact on those sport hunters presently using these lands and resources. It would require them to shift the focus of their hunting efforts elsewhere in the region. As in the case of subsistence use, relocation may put increased pressures on wildlife outside the park. However, since the lands proposed for addition represent a relatively small proportion of the region's favorable game habitat, and the major portion of the likely game target areas would remain open to sport hunting, the impacts of the proposal on sport hunting is judged to be small.

More intensive land and resource management likely to arise from implementation of a Cooperative Planning and Management Zone would result in more precise monitoring of hunting activities and improved information on which to base a sustained-yield management of game resources on these adjacent non-park lands. This could affect sport hunters.

Very little, if any, commercial trapping occurs in the area, but any present use would be eliminated within the park. The extent of sport fishing in the proposal also seems to be relatively small, but since this use would be allowed to continue, it would not be affected by the proposal.

The impact of the proposal on sport hunting would be small overall, but moderate on those individuals customarily using areas accessible by road. It would result in a shifting of hunting efforts on the part of the affected individuals and possible increased competition for resources outside the park. Since hunting will be allowed in the adjacent Yukon-Kuskokwim National Forest, the only other Federal withdrawal in the region, no additional regional or aggregate impact from the exclusion of hunting will be felt.

3. HYDROELECTRIC POTENTIAL

There are two hydroelectric power withdrawals which could flood lands within the park and its proposed additions. These are the potential dam sites at Wonder and Teklanika. However, these are no longer considered to have any significant value for power purposes and action is underway to eliminate their withdrawals. Of the other 12 potential dam sites in the region, the most likely areas to be considered for hydroelectric power production developments are those on the upper Susitna River. These are the Devil Canyon, Denali, Watana, and Vee sites. These projects are considered by the Alaska Power Administration to be among the most important hydroelectric projects in Alaska. Since they do not conflict with the proposal and it would not preclude implementation of these hydropower developments, there would be no major impact; however, transmission line route selection might be limited. It is possible that increased use of park resources and attendant local supply of visitor facilities may increase the need for additional electric power, which could lead to renewed consideration of projects within the region.

4. FOREST RESOURCES

Addition of lands to the park boundary would

eliminate the possibility of commercial or noncommercial timber harvesting. Approximately 19,000 acres identified by the Alaska Forest Survey Project in 1973 as having commercial potential would be precluded from use.

5. RECREATION AND TOURIST SERVICES

The proposal will have a moderate economic impact on recreation and tourism industries, particularly in those communities in the areas of heaviest use, along the major transportation route. Tourism and the allied services, including visitor accommodations and facilities, traveler services, air charter services, guiding and recreational services to campers, sport hunters and fishermen, and backcountry users, arts and crafts and souvenir sales are important components of the regional market economy. These components have been increasing in importance since the completion of the Anchorage-Fairbanks highway and are expected to continue to expand with or without the proposed additions.

Accompanying any increase in rate of growth of tourism which would flow from the proposal would be a slight restraint on increased use of the area by sport hunters, since lands presently used by sport hunters would be closed to hunting under provisions of the proposal. This is not expected to be a significant economic restraint since sufficient areas in the immediate vicinity with good hunting potential will remain open for such uses. Some guiding and air charter businesses may experience some increased costs and efforts in redirecting their services to other areas in the region.

Since development will be primarily concentrated along the Anchorage-Fairbanks highway, the towns of Talkeetna, Cantwell, Healy, and possibly Nenana will feel the greatest effects of increased demand for tourist facilities. Tourism will become

an extremely important factor in the local economies of these towns. There are no exact statistics available on the level of tourist-related employment in the region, but it is known that for the whole State primary employment in the tourist industry had risen to 4,050 in 1973 with a total payroll of \$26.8 million. Secondary employment amounted to 2,050 jobs with a payroll of \$13.5 million. Out-of-state tourists spending about \$73 million made tourism one of the State's largest industries in 1973.

While much of this activity occurred in the State's Southeast Region, a substantial and increasing proportion can be attributed to the attraction of the Mount McKinley area. The concessioner at the park presently employs a seasonal staff of 100 to 125 people. In addition, concentration of future growth in tourist facilities outside the park boundaries will make most of the increases in demand for services open to private businesses. It will also place the burden of supply public utilities and services on the local, regional, and State governments.

Visitor use provisions of the proposal will have a tendency to shift the focus of tourist demands for services and facilities southward from the present park entrance to communities and locations in the vicinity of one of the glaciers. Talkeetna, presently an important staging center for air tours, climbing expeditions, and hunting trips around the area, will play an increasingly important role in the tourism industry of the McKinley area. The town has train and road access, four lodges, and a lively reputation as a recreation center. There are 10 to 12 other commercial establishments that depend heavily on tourism. Communities, such as Talkeetna, which already have community facilities and service, as well as existing businesses serving the tourist and outdoor recreational users will be in a good position to support expansion in this sector. Talkeetna would be put in the position of a

"gateway" town to the southern part of the park. Thus opportunities to expand its tourist industry would be greatly enhanced, along with increased responsibilities on the town or Borough government for town planning and provision of visitor utilities.

Both Cantwell and Healy, with visitor accommodations of their own, have an important stake in tourist-related economic expansion. However, tourism does not presently seem to be as important to their economy as it is to Talkeetna's. Cantwell has substantial employment with the Alaska Railroad. Healy has both a coal industry and power plant as a substantial part of its economic base. These two towns would be affected in a manner similar to Talkeetna.

The proposal will not alter the present role of the existing park as a stimulus to outdoor recreation and tourist oriented sectors of the economy of the region, except by focusing greater visitation further south than at present, and enhancing entrepreneurial opportunities for the business communities of Talkeetna and Cantwell.

Overall, the proposal will assure that the park will continue to play an important role in the tourist and recreation industry of the villages along the Anchorage-Fairbanks highway. This will be especially true of the road adjacent to the park south of Cantwell if proposals for development there materialize.

G. IMPACT ON TRANSPORTATION

Transportation through the region is primarily by rail and highway, along the route of the Alaska Railroad and Anchorage-Fairbanks Highway, and by light aircraft. The McKinley park road makes Kantishna accessible by ground. A dirt road connects the highway with the Peters Hills-Dutch Hills area. Airstrips exist at Healy, Lake

Minchumina, Medfra, Skwentla, Talkeetna, Summit, and Cantwell. McKinley Station's existing 3,000-foot gravel strip is suitable only for small aircraft. This is the basic regional transportation in the McKinley area and the proposal will not affect it greatly. (See Transportation map.)

A State proposal exists for a transportation corridor from the Anchorage-Fairbanks highway to Kantishna and McGrath. This is the only proposed State transportation corridor that crosses the proposed additions.

If this proposal is implemented, any road construction or reconstruction within the park boundary would require review and a determination under Section 4(f) of the DOT Act of 1966, as amended (49 U.S.C. 1653 (f)). This would be in addition to an environmental impact statement as required by the National Environmental Policy Act of 1970. These studies would be aimed at insuring that there was a bona fide need for the road and that there were no reasonable or prudent alternatives to the use of park land for the road. They would also insure that if a road has to be built, it would be in such a location and of such design as to avoid significant impacts on the natural resources of the park. These studies could preclude construction of a road altogether or could require relocation of routing or special engineering design.

Preclusion of the proposed routing of the road to McGrath would result in continued reliance upon the park road for access into the Kantishna area by area residents and miners, thereby maintaining the existing situation.

A different route may need to be investigated by the State, such as the original routing proposed along the North Fork of the Kuskokwim River. In the case of either road, new routes or special construction requirements could make the cost of the road significantly higher. This impact is not

considered to be significant in the foreseeable future, because few people would be affected, because the existing situation for those affected would not be changed, and because alternative direct routes from the Anchorage-Fairbanks Highway to McGrath are available.

The proposal could have a significant impact on the use patterns of existing transportation facilities. To the extent that visitation to the park may increase from implementation of the proposal, traffic on the Anchorage-Fairbanks highway and passenger use of the railroad will also increase.

Use on the existing McKinley Park road will be lessened by continuing controlled visitor access and by the proposed prohibition of mining in the park. Visitor use and most road use by individual cars and campers will occur adjacent to the south addition, as this is where development would be concentrated.

The majority of the economic impacts related to the transportation industry will occur along the major transportation route. Cantwell and Healy will continue to rely heavily on railroad employment and will experience an increasing demand for other transportation related services. Talkeetna, at the southern border of the proposed Cooperative Planning and Management Zone, could experience a very rapid growth in this form of service industry as it would become the southern "gateway" to the park.

Overall, the proposal would have major impacts on one State transportation corridor proposal, but would affect the general regional transportation scheme only to the extent that it will tend to concentrate use along the existing, major transportation routes. Transportation related industries may experience a slight increase in their rate of growth as a result of the proposal, but the full extent of this increase is impossible to

determine.

H. IMPACT ON RECREATION AND TOURISM

The predominant recreational activities in the region are sightseeing, wildlife viewing, and nature study. These are followed by camping, hiking, mountain climbing, fishing, and some sport hunting. Recreational use of the park increased 50 percent between June 1971 and June 1972; recreational visitors reached a total of about 137,418 by the end of 1972; a 64 percent increase over 1971. It is difficult to predict how much visitation will increase as a result of the proposed additions to the park, but presumably, expanded park facilities and newly acquired natural resources within the park would raise the rate of increase in visitation at least in the short term.

The proposal will limit access along the present park road to some type of public transportation system. For the foreseeable future, access will continue to be by bus. (Only overnight campers and parties destined for the Kantishna area are presently allowed to use the road in their private vehicles.)

Recreational use and development will be concentrated along the south addition to the park, especially in the Cooperative Planning and Management Zone. Most of the intensive recreational use will thus take place on either private or State lands creating the increased economic demands discussed in section F(5).

The proposal will not permit intensive recreational activities such as downhill skiing, snowmobiling, driving for pleasure, and similar activities on the lands included within the park.

Closure of this land to such activities will result in additional pressures being placed upon other agencies and organizations within the region to provide such activities. It will also make less land

available for such activities. It will not, however, prevent all such activities on similar landscapes within the region. Pressures thus placed upon other locations could result in overuse of such locations and possible, eventual overcrowding in some spots especially favorable to specific recreational activities.

Limitations on vehicle use and camping within the park will inconvenience many visitors and may make access to the backcountry of the park slightly more difficult. However, this action will also have the impact of maintaining the availability of "primitive" areas for recreational enjoyment. Much of the emphasis of the proposed action has been placed on maintaining the natural integrity and primitive character of lands within proposed boundaries.

Increased, intensive recreational use and facilities on the lands south of the park could be concentrated on the undeveloped Denali State Park. Thus, the McKinley Park proposal could contribute to a demand for developing Denali State Park. It is possible that the State park could become heavily used with the attendant local impacts that always occur with increased visitation. The general impact on the character and natural integrity of this park could be highly significant. Yet, while Denali State Park alone could experience overly heavy recreational use, the two parks, together with private recreational development in the cooperative zone and elsewhere, would create a balanced recreational picture for the region as a whole. This impact would be highly significant in view of the fact that over half the State's population lives in the Anchorage-Fairbanks region and a great many out-of-state visitors also use the road between these cities during the summer.

Unplanned tourist facilities should not be permitted in or near the park. If the proposed Cooperative Planning and Management Zone were

implemented as envisioned, it would provide a means for maintaining the natural, esthetic qualities of the park. At the same time, it would provide for orderly economic developments of necessary facilities and the appropriate use of the land as well as other natural resources. Tourists' needs would be met by facilities designed to enhance the natural environment. Although restrictions on construction might conceivably have a negative impact on some investors in the short run, it would, in the long run, result in higher quality developments and more desirable tourist attractions--consequently sounder economic investment in the long run.

Overall, the impact of this proposal on recreation and tourism will be to concentrate intensive use along the transportation corridor and the surrounding area. Recreational use of the park will become decreasingly auto-oriented in character. Economic benefits would occur throughout the region, especially in the villages along the south side of the proposal, Healy, and possibly Nenana.

I . IMPACT ON MINING AND MINERAL ENTRY

There are 15 mineral patents within the proposed additions to Mount McKinley. Lands legally located and maintained under the mining regulation amount to 45 groups consisting of 365 legally located and maintained claims encompassing about 6,440 acres. These lands are concentrated chiefly in the Kantishna area, although most of the active claims are in the Stampede area. There are also concentrations of claims south of the Alaska Range, but very few are located within the proposed park boundaries (see Table 11, Chapter II, and Land Ownership map). The Kantishna district was a gold boom area just after the turn of the century. According to the Bureau of Mines, there is a probable existence of a significant mineral resource potential in the Kantishna-Stampede district despite its relatively

modest production record. Some doubt exists as to whether this potential is of sufficient size to support large-scale commercial mining operations.

Further intensive investigation would be needed to determine Kantishna's remaining production potential; however, mineral production in the area has been declining since its boom years in the early 1900's, but is reportedly on the increase now. Total production of gold through 1970 has been fifty-one to fifty-six thousand ounces; silver approximately 19,000 ounces. There has also been limited production of copper (639 pounds), lead (13,801 pounds), and antimony (1,890,391 pounds).

If the proposal were enacted, additional claims and patents in the Kantishna-Stampede area would be prohibited. Existing operations would be allowed to continue, but with increased control. Private landholdings in the area would eventually be purchased. The significance of this action's impact on the local economy is hard to evaluate since the present value of the mining activity in the area is not known. Detailed geological mapping and sampling would be required to determine the district's mineral potential. The USGS believes silver to be the mineral having the best potential (USGS, 1974). Mining is thought to be a modest source of income to some individuals with few, if any, major company operations. It is therefore felt that the proposed action may have a major impact on a few individuals in the Kantishna area, but that the impact on the region as a whole and on overall mining activity in the State would be insubstantial.

The other major mineralized areas in the region are the mineralized belt south of the existing park and the Purkeypile and Shellabarger Pass areas. The known high potential areas to the south, including the Golden Zone, Peters Hills-Dutch Hills district, and the Collinsville district have been excluded from the proposed boundaries. It is

thought that the lands between these districts may have mineral potential because of the existence of similar geologic terrain. However, no real potential has been demonstrated and much of this area is covered by glaciers.

The overall potential of the area to the south is estimated at \$360 million. (USGS, 1974) Therefore, should some of this potential be found to lie within the proposed boundaries, the impact of prohibiting mining could be significant. Almost all of the areas of past production lie outside the boundaries. The impact of the proposal on this mining area will probably be small, unless new reserves, suspected but unproven, are shown to exist.

The Purkeypile area shows high potential for base metals. Geologic mapping of the area has not yet been completed, but on the basis of present information, it is thought that the best production potential areas have been excluded from the proposed boundaries. Thus the impact of the proposal on this area would also be small.

Coal production and use has played an important part in the economy of Healy. Employment with the Usibelli Company and with the power plant in town provides a major source of the town's income. The coal bearing rocks of the Nenana field (Healy-Suntrana area) occur adjacent to the north boundary, both in and out of the park. Most of the field lies outside the proposed boundary as does all of the present production area. Coal reserves in the area of ecologic concern in this vicinity constitute only 0.1 percent of the statewide potential although accessibility of the area's reserves increases its value. Therefore the impact of this proposal on coal production and potential in the area would probably be very slight at present. Future demand for increased supplies could increase the impact in proportion to the demand. Part of the southern border of the proposal area is peripheral to the Cook Inlet

petroleum province but the potential for oil and gas production within the actual boundary is considered low (USGS, 1974).

Overall, unless suspected reserves are proven to exist within proposal boundaries, the impact of this proposal on mining and mineral entry in the region would be slight. Within the proposed park boundaries the most significant impact would be felt at Kantishna. Outside the boundaries, should the Cooperative Planning and Management Zone be implemented, it is possible that restrictions would be placed on disruption of land surface by mining operations in highly visible areas. This could place somewhat higher costs on mining in the area, but probably not sufficiently high to constitute a substantial impact.

J. IMPACT ON CULTURAL RESOURCES (ARCHEOLOGIC, HISTORIC, AND ARCHITECTURAL)

There are relatively few known archeological sites in the Mount McKinley region and there is thought to be only a small potential for discovery of significant numbers of new sites. There are known sites, used for hunting, quarrying, chipping, and possibly habitation, at Lake Telida, Lake Minchumina, and Teklanika River near the Teklanika campground. Presently there are no sites within the proposal that appear on the National Register of Historic Places. However, if the proposal was enacted, research would be carried out to determine which of the known sites and those that may be discovered would be suitable for such designation. In addition to archeological sites, the boom-bust mining town of Kantishna might also merit treatment as an historic resource. These resources would be preserved and protected under this proposal.

The proposed action would result in the identification of significant cultural resources

within the present park and proposed additions. This identification of cultural resources and resulting public interest in them could lead to impacts on these resources such as vandalism, trampling, looting, etc. However, identification and recognition of their importance will also result in programs to assure their protection.

Impacts leading to degradation of the resources would probably be light, but could be significant if the integrity of these resources is compromised. More important would be the impact of research on the identification and the knowledge of the area's cultural significance.

K. IMPACT ON LAND USE PATTERNS

1. PRIVATE OWNERSHIP

If this proposal is implemented, all private lands within the proposed boundaries will eventually be acquired. Present ownership patterns are as follows: one Native allotment application of 80 acres, 30 patented sites totalling 245 acres, 15 mining patents totalling 738 acres, and 45 legally located and maintained mineral claims totalling 6,440 acres, plus five private applications. Upon cessation of occupancy, any uses which are impinging upon wildlife values, vegetation, or scenic quality will be removed.

While there are presently no year-round residents within the proposed additions, private owners use their lands seasonally, some for income. Adverse impacts from relocation or displacement on the individuals affected will be great. In relationship to the overall population of the region, however, their numbers are small. Others who might wish to secure lands in the area in the future will be precluded from doing so.

2. OVERALL LAND USE PATTERNS

Implementation of the proposal would result in a basic shift in concentrations of land uses in the McKinley region. Heavy visitor use and recreational development will be redirected from the present area of concentration along the McKinley Park road to areas near and outside the park boundary to the south. New developments are intended to occur primarily in the Cooperative Planning and Management Zone. Expected increases in visitor, residential, and industrial uses of the area will therefore have their impacts concentrated in this Zone.

Implementation of the proposed Cooperative Planning and Management Zone could result in some regulation of development techniques or restrictions on developments in certain areas. This would occur in locations where commercial, residential, or recreational strip development is taking place or could take place, such as the present development along the Anchorage-Fairbanks Highway and the Denali Highway.

This type of policy would have the impact of changing potential land use patterns within the zone. Essentially the same kinds and amounts of use could take place but would occur in more organized and predetermined patterns and would be concentrated away from areas of high visual and ecological quality in order to minimize adverse impacts on the park and surrounding lands.

The impact of the proposal on land use within the existing park would be a shift away from intensive visitor use to the more "primitive" type of visitor use experience. Vehicle access by transportation system would still occur, but would be controlled in order to assure that the lands north of the Alaska Range will retain an essentially wild character.

L. IMPACT ON AGRICULTURE

No immediate impact on agriculture would be felt as a result of this proposal as there is no present agricultural use of the lands within the proposal area, and except for Lignite no significant agricultural use in the region south of Fairbanks. Future impacts are more uncertain. The Soil Conservation Service, U.S. Department of Agriculture, has recently identified the Toklat River-Kantishna Hills area, a small portion of which is in the extreme northwestern part of this proposal, as having lands suitable for agriculture. Not all of this identified area can be cultivated, however, because of gradient, permafrost, and other factors. A more detailed study will be necessary to more accurately determine the location of viable farm units within this area. (Alaska Rural Development Council, 1974).

Statewide demand for agricultural produce is currently being met mainly by production in the Matanuska Valley area. Export markets for Alaskan agricultural products do not presently exist.

Lack of data and experience make speculation as to future market development difficult. If export markets do develop, the loss of the land previously described to agricultural use could have a negative impact. This impact will be minor because of the small size of the area affected.

IV. MITIGATING MEASURES INCLUDED IN THE PROPOSED ACTION

The proposed legislation provides that relocation costs will be paid and allocation assistance provided to any private property owners affected by the extension of the park boundaries.

Boundary locations have been made which recognize the known mineral areas of the Golden Zone, Dutch-Hills, Peter Hills, Collinsville, and Purkeypile districts and exclude those areas from the proposal.

The proposed Cooperative Planning and Management Zone along the south and east sides of the expanded boundary will mitigate the need for a larger boundary proposal to include these lands for protection of the scenic foreground of the park. This zone is designed to accomplish the protection of esthetic and scenic values, while providing for multiple-use management of the included lands to the ultimate benefit of the local region, the State, and the Nation.

Baseline research capacity studies will be conducted in order to provide the National Park Service with the information necessary to define the use limitations of the park.

The essentially conservative nature of the conceptual master plan regarding visitor use also mitigates potential adverse impacts on resources which could occur should uncontrolled visitor use take place. This conservative approach should be regarded as a possible temporary measure, pending results of the capacity studies. Development proposals have been made only in areas where minimum conflicts would occur with the primary natural resources of the park, yet the proposals allow for public appreciation of these resources. Type and location of such developments have been proposed to ensure the widest possible diversity of types and intensity of use consistent with current knowledge of the resources and National Park Service policies.

Before any development proposal is implemented, research and detailed development plans will be prepared with the objective of preventing undue destruction or degradation of natural, archeological, and historical resources known or as yet undiscovered and social and cultural patterns. An environmental assessment will be prepared to analyze the alternatives in relation to the resources and patterns in the area, the function and scope of the proposed development, and the relationship of the proposal to the site. An environmental statement will be prepared for all development plans which are determined, through the assessment process, to have a significant impact on the natural and human environment. Public notification of the results of the assessment will be made, and the assessment will be available for public review at least 30 days prior to initiation of an environmental statement or implementation of the action in any case where it may be found that no significant impact would occur.

The proposal to manage the south addition in such a manner that greater levels of use are allowed than on the north side of the Alaska Range mitigates the adverse effects of limitations on visitor use of the northern portion of the park.

Interpretation of wilderness values will lessen adverse environmental effects caused by visitor misuse of the environment, and help to mitigate some of the man/wildlife interactions through education and increased appreciation of natural relationships.

The proposal to rely on private enterprise and other public agencies for the greatest possible number of needed visitor service facilities such as hotels, vehicle campgrounds, etc., provides the opportunity for a more stable and diversified regional economic base than would be possible if all such facilities were provided within the park. At present, a study area has been identified near

the southwestern portion of the park for the Mount McKinley Recreational City proposed by Alaska Senator Mike Gravel.

No Federal action that might affect cultural resources will be undertaken without prior compliance with the procedures established under Section 106 of the National Historic Preservation Act (80 Stat. 915) or Section 2(b) of Executive Order 11593 (May 13, 1971), as applicable, have been observed.

Compliance with these procedures entails consultation with the Advisory Council on Historic Preservation and the Alaska State Historic Preservation Officers to help assure that there will be no significant adverse impacts on the area's cultural resources.

V. UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

A larger park with additional access and additional visitor services and facilities can be expected to increase visitation to the area. This would result in larger visitor-caused impacts on plant and animal resources, and visitor penetration into areas seldom visited at the present time, especially within the southern addition. Additional numbers of people will be accompanied by increased refuse, sewage disposal requirements, development of water supplies as well as adverse visitor/wildlife interactions. Essentially the same consequences will occur with regard to developed areas adjacent to the park.

All proposed developments would require some degree of modification of natural resources and loss of natural values (scenery, landscape integrity, and wildlife habitat), primarily affecting the visitor to the park as it relates to his esthetic experience.

Private development, land sale promotion, and business development could not occur on proposed additions. Potential revenue to the State from land sales and taxes would likewise be eliminated.

Approximately 150,000 acres of land near Lake Minchumina, Cantwell, and the western end of the existing park presently are used by Natives for subsistence hunting purposes. Although these lands will continue to be available to those now using the area for this purpose, new settlers will have to hunt elsewhere, possibly increasing hunting pressure on game animals in other areas. The total immediate effects will be insignificant. Future impacts on new settlers coming into the area cannot be accurately assessed at this time, but will increase in proportion to their number.

Sport hunting would be prohibited on lands proposed for addition. The most used locations from which hunting would be eliminated are the Kantishna area, lands north of the Outside Range west of Healy, particularly the Stampede and the

Cantwell areas.

Most hunters come from local communities; exact levels of use are unknown. A relatively minor amount (three or four companies) of mining activity is actually taking place within the park and the proposed extensions at the present time. However, an unknown number of individual businesses may be displaced by imposing the restriction on mining. A maximum of 15 patents and 45 legally located and maintained claim groups totaling 7,178 acres probably would eventually be purchased by the Federal Government.

In the overall economy of the State, mineral and petroleum extraction restrictions in the area proposed for addition to the park would have a relatively small effect. The exact amount of minerals extracted by present operations is unknown but relatively small (Berg and Cobb, 1967). Exploration in the future and the development of potential deposits within the proposal boundaries would be limited by the proposal. Known deposits of economic importance within the proposed additions and the existing area are of unknown size (Chapter II, section 10). The most important known mineralized areas, with the exception of Kantishna, have been excluded from the proposal.

VI. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE AND ENCHANCEMENT OF LONG-TERM PRODUCTIVITY

The proposals are intended to maintain indefinitely the long-term natural productivity of the area and the quality of its natural resources.

Establishment of the area would promote continuation of natural biological productivity of the included lands and water. It would preclude human manipulation of resources which possibly could increase, at least in the short-term, biological productivity of the area. Lack of data prohibits reliable predictions as to which course of action would provide for greatest long-term biological production. The proposal will ensure the continuation of a natural ecological balance in the larger ecosystem and preservation of a natural primitive condition.

The plan will have a stabilizing influence on environmental quality and natural production on adjoining lands, with the park acting as a "reservoir" of wildlife, unpolluted air and water, and as a continuing scenic resource.

The area, acting as a protected reservoir of protected habitat for native wildlife, will provide continued wildlife production.

Except for previously described mineral resources and fish and game, the proposal area has little known material value. If substantial mineral resources were found and exploited, the economic benefits and the social benefits derived therefrom would be moderate to high but could be comparatively short-term, with possibly serious impairment or destruction of the natural, scenic and ecological values of the region.

It is possible that there would be a short-term decrease in economic gain by local communities if the proposal were enacted. Incomes from prospecting would be decreased by the deletion of lands that can now be used for those purposes. These short-term uses would possibly support a few persons through the remainder of their lives.

It is likely that the carrying capacity of the land for nonconsumptive uses is greater than for consumptive uses, with the result that the long-term productivity will equal or exceed the present productivity.

Long-term economic gains probably will result as tourism increases in the area. These gains will include some of short term (e.g., during construction of facilities) but will be largely long term through provision of services (meals, lodging, transportation, guiding, etc.) and some goods for the visiting public. This will result in a more diversified economic base that will include many of the previously included activities plus new ones generated by increased tourism.

Putting the area's mineral resources into preservation status now will have long-range economic consequences in at least two ways. If, with time, extractive technology becomes more efficient, this technology should allow more complete and more profitable extraction of the resources, should man's future needs dictate and Congress approve such extraction. If other technologies reduce or eliminate the need for these resources, postponement of immediate extraction will allow perpetuation of natural values on these lands.

VII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS

Only two of the proposed actions contemplate an irreversible or irretrievable commitment of resources. These are developments for public use and management to maintain biotic diversity.

Management to maintain biotic diversity may require controlled burning of some natural vegetation. The commitment would be long-term and irretrievable for those affected vegetative resources. Regeneration of all resources affected by burning would then occur as a natural process.

Additions to the park, that is, changes in the existing boundary, would preclude realization of some economic benefits from both renewable and nonrenewable resources, such as minerals and timber of these lands. Elimination of mining would affect a maximum of 15 mineral patents and 45 legally located and maintained claim groups totaling 7,178 acres. Economic value of lost mineral revenue is unknown. Sport hunting and commercial trapping would be affected, and relocation of these activities would result in increased pressure on other areas.

Commercial, recreational, and residential developments would be precluded. Subsistence uses, thought to be light in the proposed additions, would be allowed for those presently using these lands in this manner, but not by others. These losses are, for all practical purposes, irretrievable to new entrants into the area unless subsequent legislative action should remove these lands from the park or extend subsistence utilization of these resources.

Proposed developments for public use would require both irretrievable and irreversible commitments of resources. Proposals for developments to accommodate use and facilitate management include roads, walks, trails, parking areas, utilities, building sites with some attendant erosion, the consumption of energy, and alterations to the landscape as well as the

destruction or alteration of some wildlife habitats. Less than one percent of the total park area would be affected by these developments.

The proposed action is a policy decision favoring preservation of the natural environment. Therefore, natural resources such as the mineral potential that might exist in the park will not be irretrievably lost. Congress at any time can alter the management of the area, opening it to exploitation of resources, or even disestablish the park, should the long-term future indicate such action to be in the public interest.

VIII. ALTERNATIVES TO THE PROPOSED ACTION

A number of alternative actions have been considered concerning disposition and use of the lands proposed for addition to the present Mount McKinley National Park. Generally these alternatives fall into four categories: (1) no action, (2) alternative boundary locations, (3) alternative management concepts, and (4) alternatives to the conceptual master plan.

A. NO ACTION

The considerations of this alternative would be applicable if the extensions to Mt. McKinley National Park were not proposed or are not acted favorably upon by Congress prior to December 18, 1978.

Within the proposal area there are approximately 3,077,647 acres of d-2 land and approximately 114,397 acres of d-1. Upon statutory expiration of the d-2 withdrawals now in effect on the proposed extensions, automatic reversion to d-1 would occur as provided in Public Land Order 5197, dated March 9, 1972. D-1 withdrawal through reversion provides for the same forms of protection as previously existed in d-2 withdrawals. The land within the proposal area which is presently in d-1 withdrawal would remain classified as d-1, with the same forms of protection as d-2 lands except that they would remain open to metalliferous entry.

Under d-1 withdrawal the areas would continue to be managed by the Bureau of Land Management. Since d-1 status is based on an administrative action of the Secretary, it can be changed relatively easily by other administrative action.

The entire area of the proposed additions to Mount McKinley National Park recently has been

managed under a general multiple-use management concept. Under this form of land management as many uses as there are resources suitable for each particular use may coexist on any given parcel of land at one time until competition for the area involved forces concentration on the most needed use. Uses currently applied to these lands include such activities as hunting, trapping, mining, tourist facility operation, and development of residential and recreational homesites. It is assumed that no action on this proposal would ultimately result in a continuation of the present management system, multiple use.

These proposed additions to the park have a wide variety of resources including scenery, part of a relatively intact large mammal ecosystem, minerals, and value for recreation and tourism as a result of the scenery and relationship to the ecosystem. These areas are geologically and biologically diverse. The demands made upon the lands are equally diverse.

IMPACTS

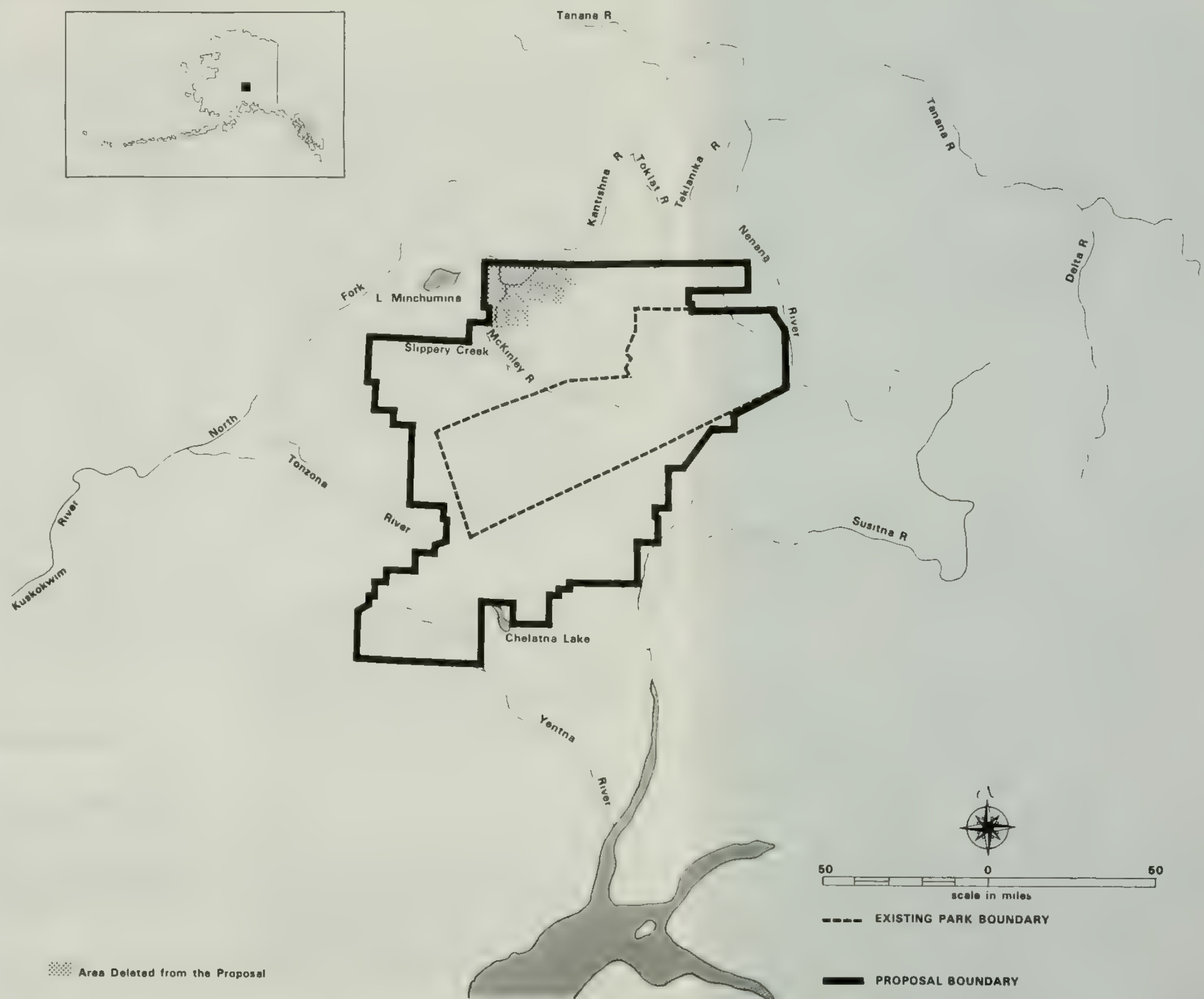
The outstanding effect of retaining the lands of this alternative under multiple-use management is that it foregoes the application of primary use principles, which have never been applied to the lands. The variety of uses currently applied to the lands will not only continue but in all probability will increase or expand.

No action could permit continued management of resources in the proposal area so that they may be extracted with attendant economic benefits. Construction of a surface transportation link from the Fairbanks area to the Upper Kuskokwim Valley, if found to be necessary, would be permitted. Recreational and tourist oriented developments would be permitted within the area as needed to meet demands of users.

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ALTERNATIVE B-1



This situation will create the conditions for competition for use of the land and resources and in some areas the current principal use could be replaced in the future by another, based on need. The nature of the resources of this area are such that the continued application of multiple-use management could result in the economic environmental effects being inversely related to the natural environmental effects.

If this proposal is not enacted habitat protection and maintenance may or may not be given highest priority. While high quality habitat might be maintained, the uncertainty of this occurring would be far greater. To the degree that human activities and pressure may degrade habitat, wildlife populations could be adversely affected and favored movement patterns disturbed. Certain of the large carnivores, notably wolves, are known to be intolerant to the presence and activities of man. Disturbance of their populations could thus unfavorably alter predator-prey relationships and alter relative numbers of these species remaining in the area affected. Caribou movements could be disrupted (as recent studies along the Taylor Highway suggest) resulting in reduction of herd size. Developments and associated human activity near waterfowl nesting areas could cause relocation of the disturbed species.

B. ALTERNATIVE BOUNDARY LOCATION

1. NATIONAL PARK EXCLUDING MOOSE CALVING AREA ADJACENT TO LAKE CHILCHUKABENA

Of several alternatives that involve different park configurations, one is a revised park boundary that does not include 250,000 acres adjacent to Lake Chilchukabena.

IMPACTS

The general overall impacts of this alternative would be about the same as described in section III of this statement. However, most potential, through National Park System management, for moose calving protection in the northwestern portion of the action discussed in section I will be excluded. This alternative will make 250,000 acres of land available for continued multiple-use management. The options and resulting impacts associated with this concept of management are briefly discussed in the alternative of no action. Most of the 19,000 acres of the proposal area identified as commercial forest land would be available for use. Any transportation corridor development through this area would produce impacts associated with the development of recreational and utility facilities along the route and nearby lake. The outstanding effect on the area and the complementary lands within the park would be to diminish the wilderness character of the area. This character is now compatible to the uses of the area, within and outside the park.

2. NATIONAL PARK EXCLUDING WATER-FOWL BREEDING AREA SOUTH OF LAKE MINCHUMINA

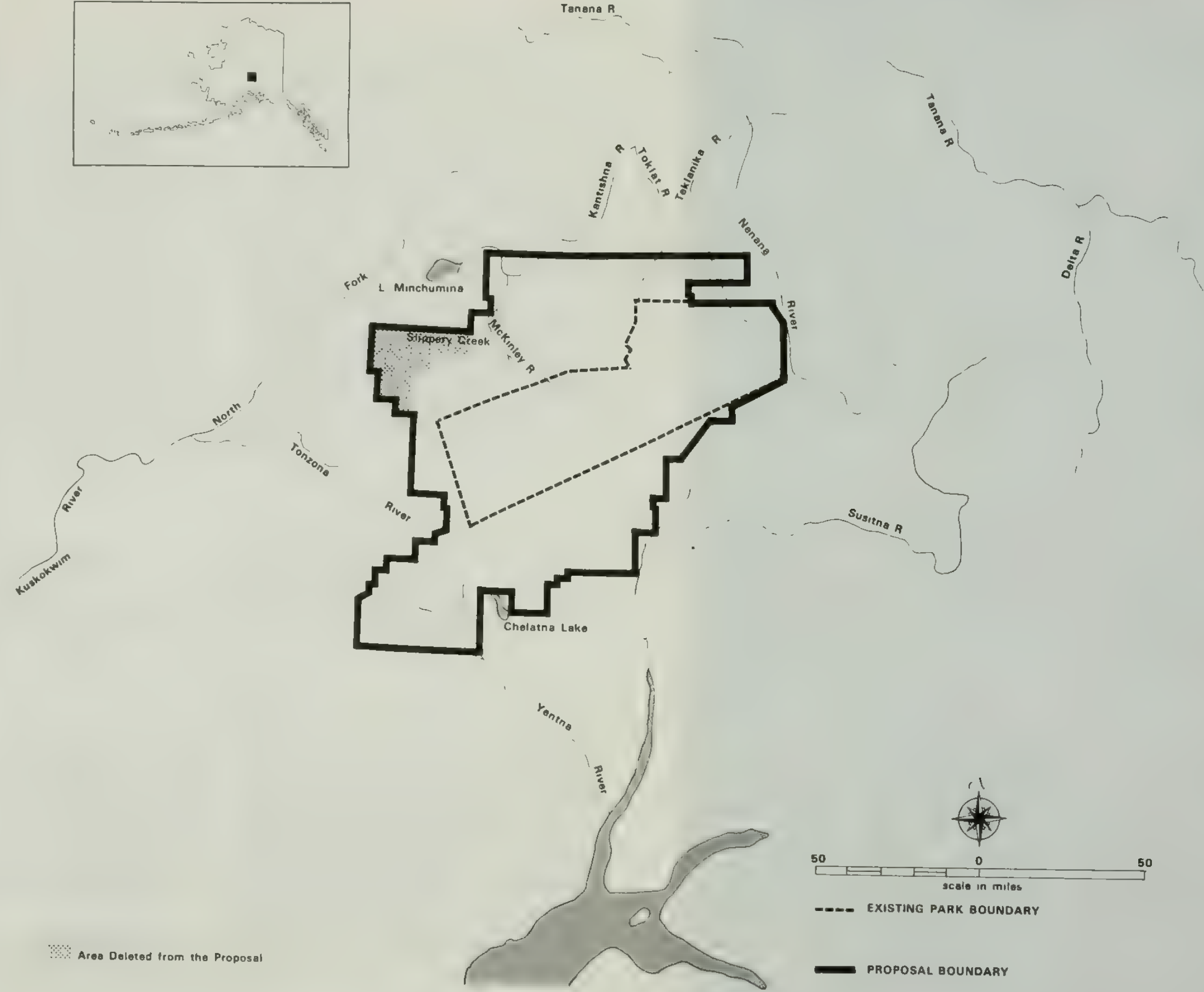
Another alternative that involves different park configurations is a revised park boundary that does not include approximately 345,000 acres south of Lake Minchumina.

IMPACTS

The overall impacts of this alternative would be about the same as described in section III of this statement. However, most potential for protection of waterfowl and associated wetland life in the northwestern portion of the action through National Park System management as discussed in section I, will be excluded. This would reduce the

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ALTERNATIVE B-2



diversity of habitat types in the park, as this quality of breeding area is not found elsewhere in the proposal. This alternative will make approximately 345,000 acres of land available for continued multiple-use management. The options and resulting impacts associated with this concept of management are briefly discussed in the alternative of no action. The Alaska Department of Highways will have the option to route one of its high priority highways through the important migratory waterfowl breeding habitat south of Lake Minchumina, as currently proposed. A road through this area would produce impacts associated with the development of recreational and utility facilities along the route and easier access to the wetlands. The outstanding effect on the area and the complementary lands within the park, would be to diminish the wilderness character of the area. This character is now compatible to the uses of the area, within and outside the park.

3. NATIONAL PARK EXCLUDING NORTHERN ADDITION

This alternative considers a Mount McKinley National Park that includes the present park and the additional lands to the south.

IMPACTS

This alternative would have a number of important effects. Many of the same impacts discussed in section III of the statement would still occur. Of primary importance is the viability of the large mammal community now made up of existing national park and other Federal lands. This community is symbolized by the Dall sheep, wolf, moose, marten, grizzly bear, and caribou.

Unless equal effort is exerted on other than park lands, the survival chances of these mammals could

be lessened as a result of intrusions associated with proposed highway construction, continued mining activities, and other land-intensive human uses.

This alternative will make approximately 1.7 million acres of land available for continued multiple-use management. The options and resulting impacts associated with this concept of management are briefly discussed in the alternative of no action. Under this alternative the mining operations of the Kantishna area would have the option to continue its economic return to the local region and State. The option is also available for expansion of operations and the introduction of new patents and claims to the area. The Alaska Department of Highways will have the option to route one of its high priority highways through lands included in the action described in section I of this statement, but excluded from this alternative proposal.

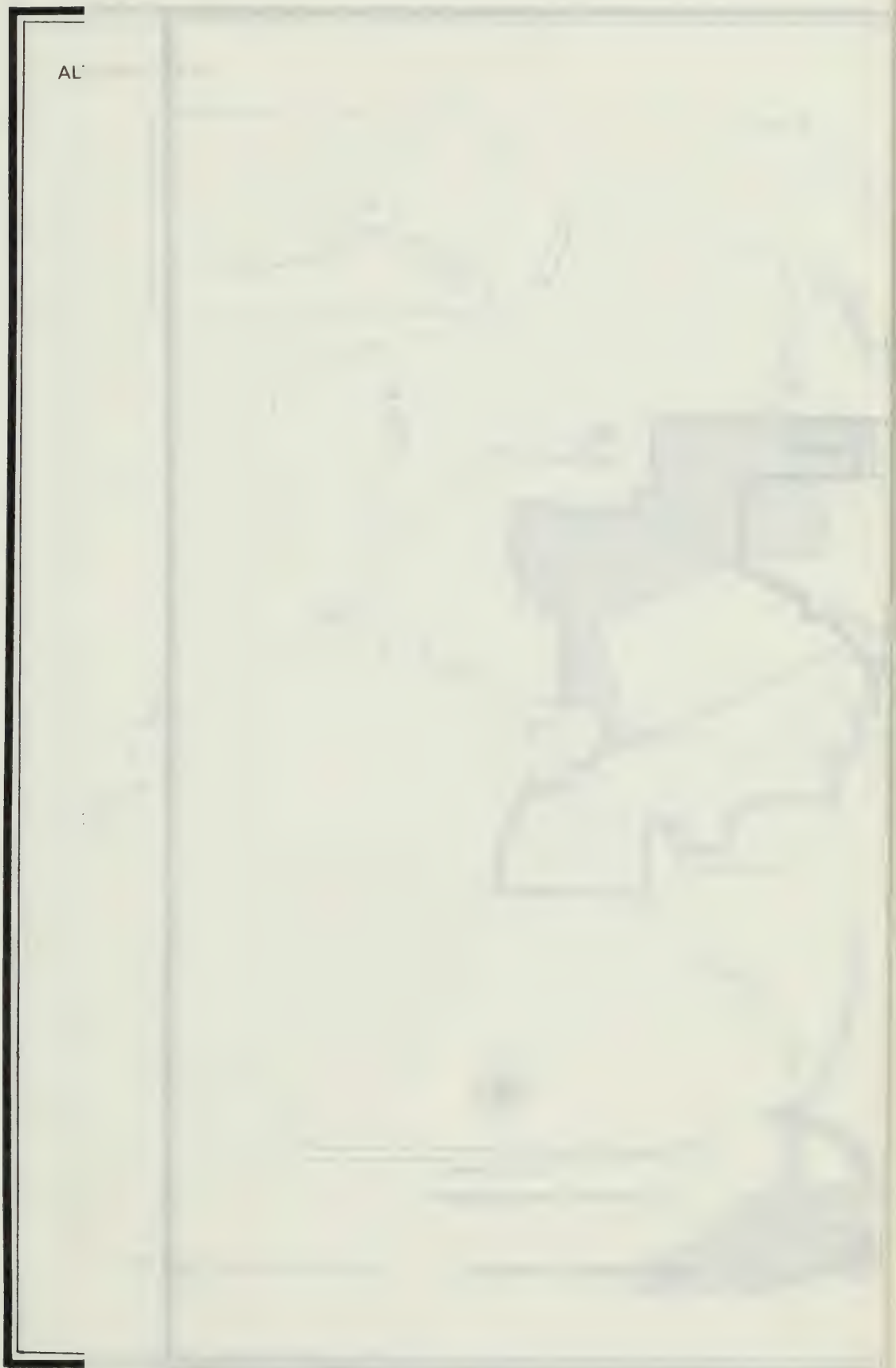
4. NATIONAL PARK EXCLUDING SOUTHERN ADDITION

This alternative considers a Mount McKinley National Park that includes the present park and the additional lands to the north.

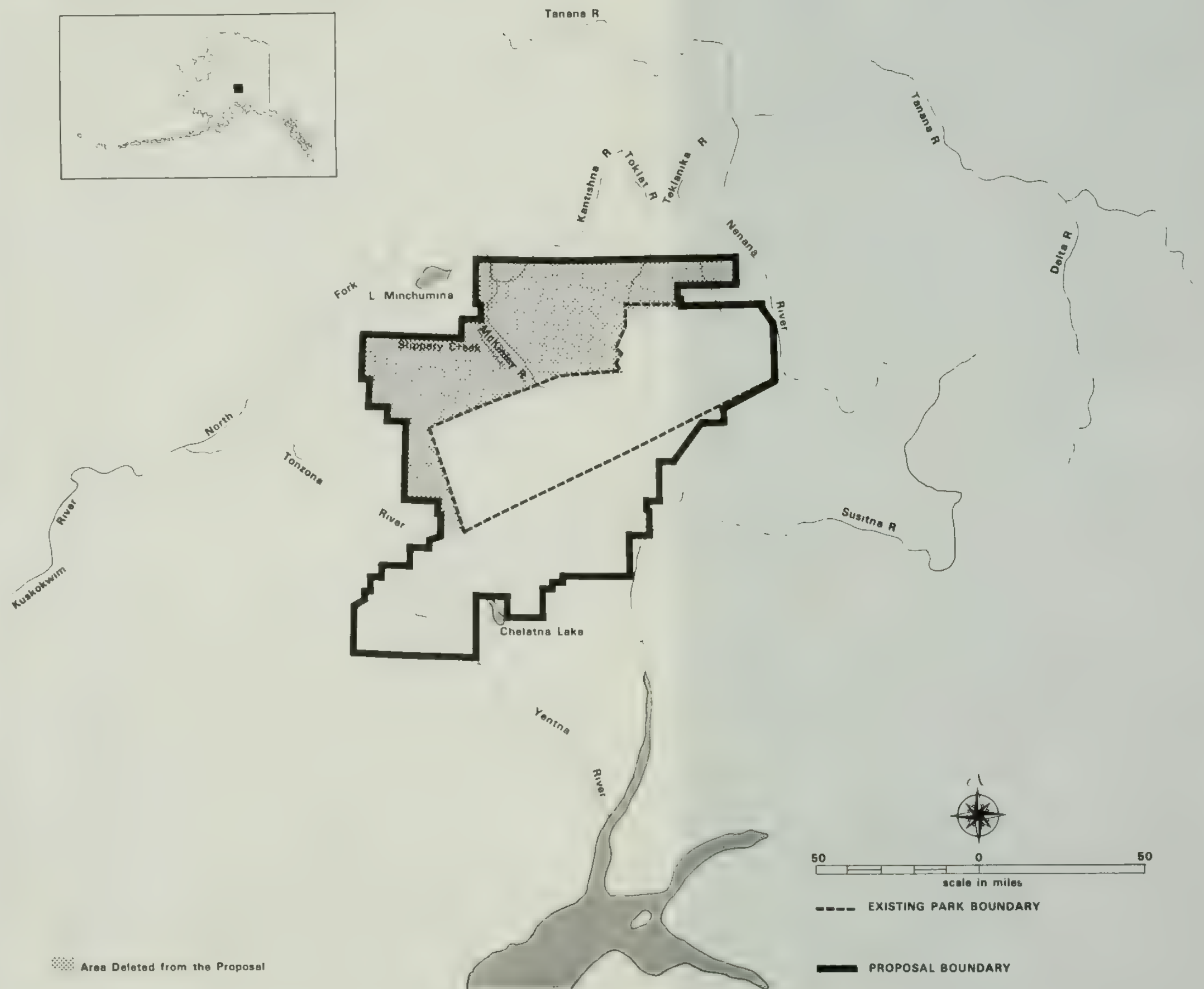
IMPACTS

This alternative would have a number of important effects. Many of the same impacts discussed in section III of the statement would still occur. However, the potential for the protection of the glacial systems of the south side of the Alaska Range, a small but critical section of the summer range of the McKinley caribou herd, the remainder of the Mount McKinley massif not included in the existing park, the Cathedral Spires, and small examples of the lowland vegetative types south of the Alaska Range would be excluded.

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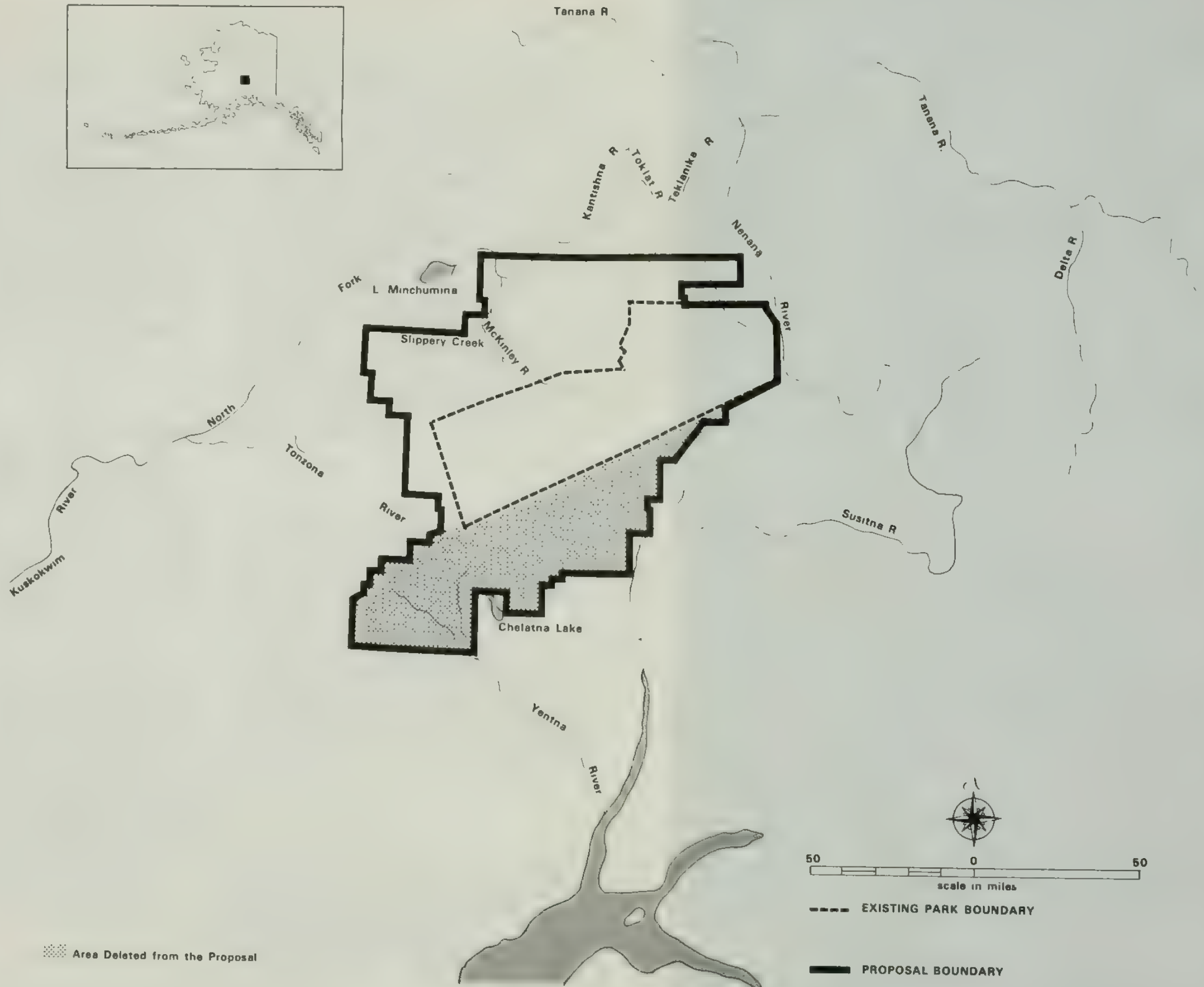


ALTERNATIVE B-3



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ALTERNATIVE B-4



This alternative will make approximately 1.7 million acres of land available for continued multiple-use management. The options and resulting impacts associated with this concept of management are briefly discussed in the alternative of no action. Under this alternative the option is open for future exploration and extraction of minerals from the mineralized zone between the Golden Zone and the Dutch Hills-Peters Hills area. The alternative does not affect any extensively used hunting areas. This proposal has potential to promote economic opportunity for the area, as it would exclude certain areas of land well suited for mass recreation facilities, such as ski areas and lodges, from the park.

5. NATIONAL PARK INCLUDING NORTHERN SLOPES OF THE OUTER RANGE

This alternative considers a Mount McKinley National Park that includes the area discussed in the proposed action and an additional 92,000 acres of the northern slopes of the Outer Range. This area constitutes extremely critical range for the wolf packs in the eastern end of the existing park. This area is identified as an area of ecological concern in section I of this statement.

The territories of the park wolf packs are fairly well understood in this area. These packs range north out of the park through the Outer Range into the unnamed valley immediately to the north and have been sighted as far north as the proposed northern boundary. Hunting pressures are heavy on these packs, even though aerial hunting is no longer legal. Continued hunting and habitat disturbance could modify the social structure and distribution patterns of the packs and disrupt the predator-prey relationship of the large mammal communities within the existing park.

IMPACTS

One of the major impacts of this alternative is the change of status of 92,000 acres of State selection tentatively approved lands to that of National Park System. This alternative would affect the same area with the same impacts discussed in section III of this statement. However, the potential for the protection of the range of wolf packs would be included. This proposal precludes the management of 92,000 acres of land under multiple-use principles that are optional through State ownership. The State currently recognizes the wolf packs as an important resource and has withdrawn the options for recreational homesite staking. The State has also excluded future transportation developments within this area. The alternative proposal will result in a deposit of coal being included within the park, and the potential for its extraction will be eliminated.

6. NATIONAL PARK INCLUDING AREA EAST OF LAKE MINCHUMINA

This alternative considers a Mount McKinley National Park that includes the area discussed in the proposed action and an additional 126,000 acres located at the northwestern corner of the proposed area covered in Chapter I of this statement. This additional area is presently classified d-1 and was identified in section I of this statement as an area of ecological concern. The lands considered under this alternative complete the moose calving area discussed under Alternative 1.

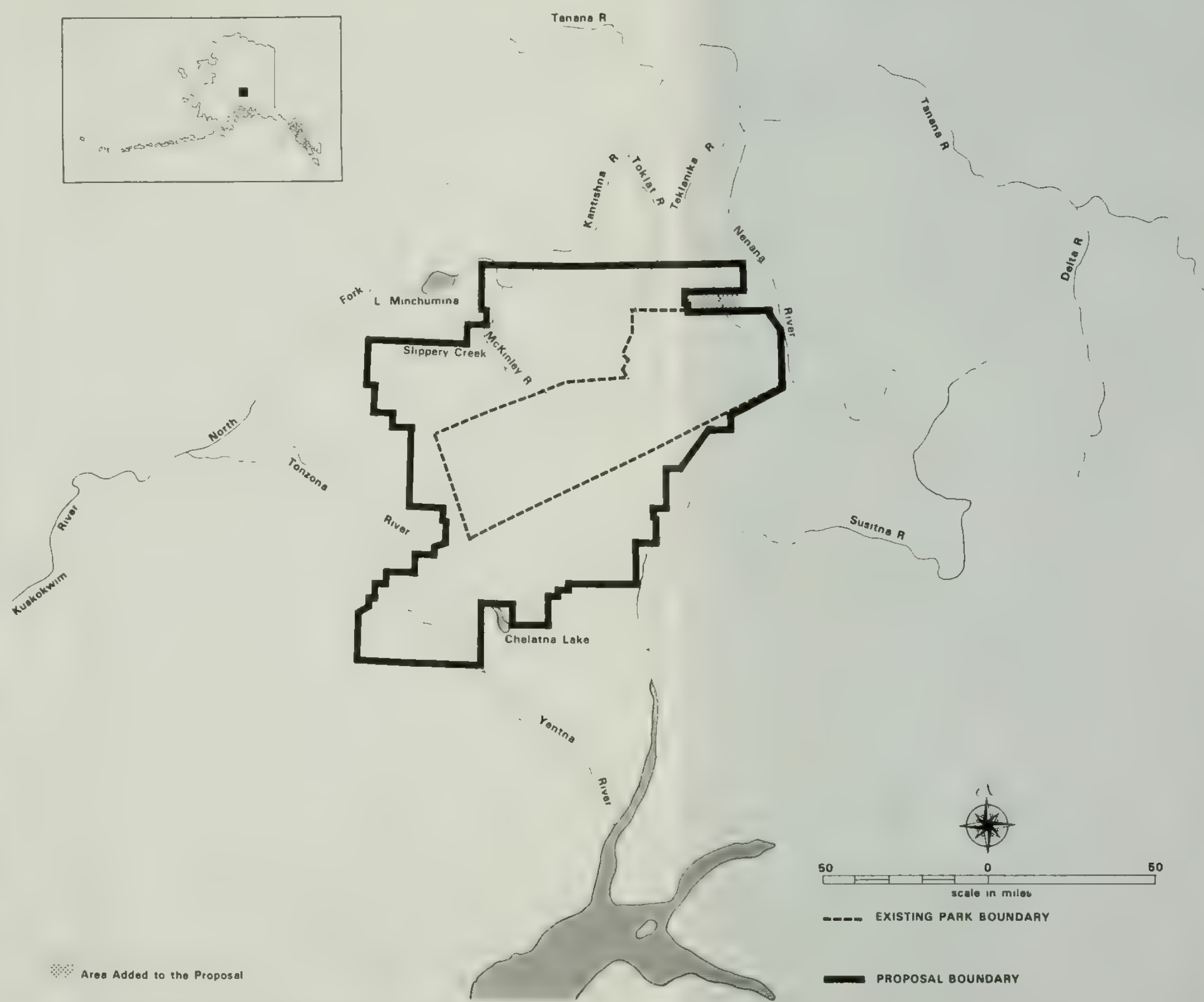
IMPACTS

This proposal would change the status of 126,000 acres of d-1 lands to National Park System. The effects of this alternative proposal would be about the same as those discussed in section III of this statement. However, the size of the area would

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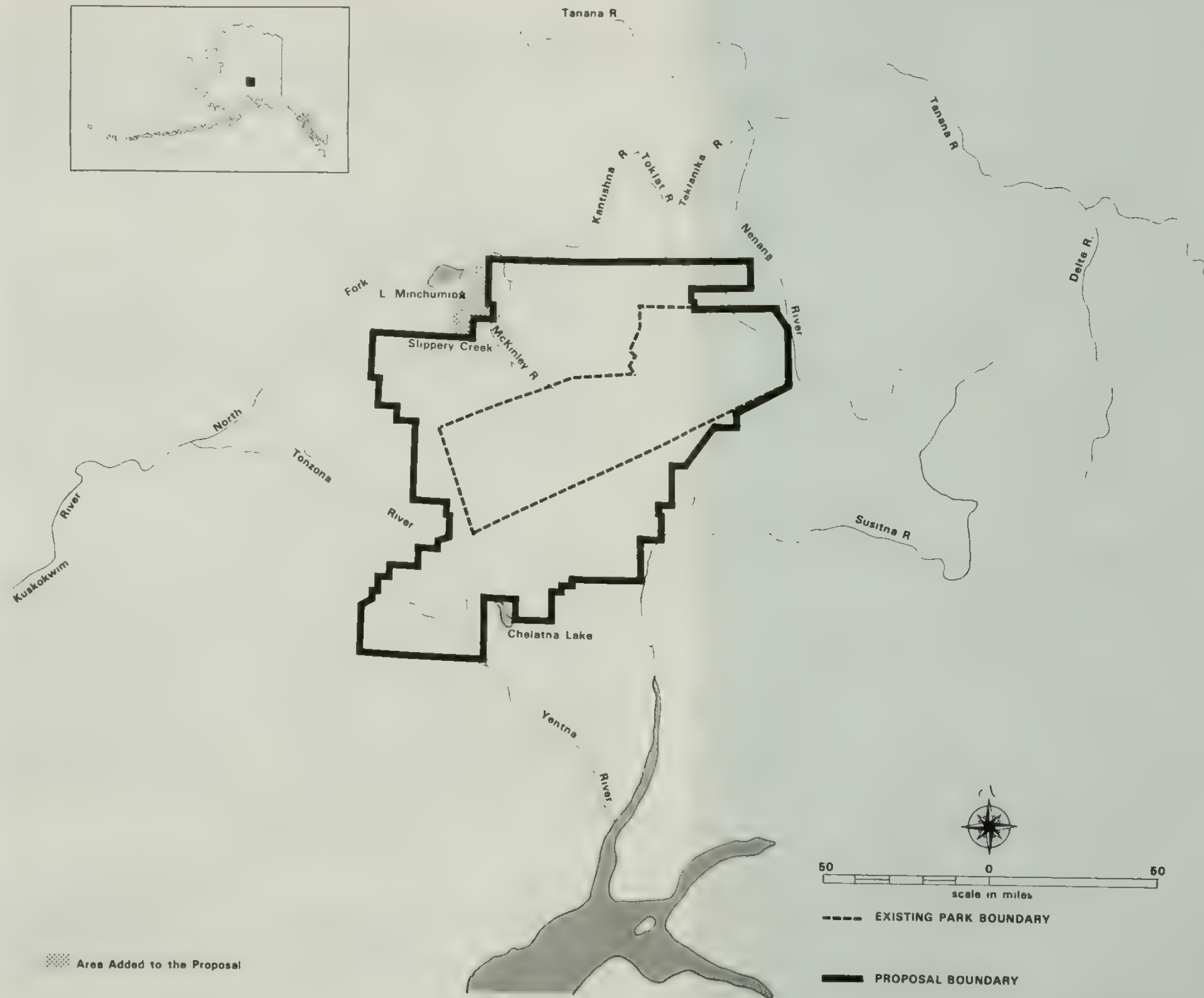


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ALTERNATIVE B-6



be increased by 126,000 acres and the potential for further protecting the moose calving would be included. This proposal would have minimal impacts on the hunting patterns of the people who live at Lake Minchumina. The proposal precludes the management of 126,000 acres of land under multiple-use principles.

7. NATIONAL PARK INCLUDING MYSTIC PASS

This alternative considers a Mount McKinley National Park that includes the area discussed in the proposed action and an additional 4,000 acres north of the Cathedral Spires. This additional area consists of the uppermost portion of the headwaters of the West Fork of the Yentna River. The addition is State selection pending lands, and was identified in section I of this statement as an area of ecological concern.

IMPACTS

This alternative would change the status of 4,000 acres of State selection pending lands to National Park System. The effects of this alternative would be about the same as those discussed in section III of this statement. However, the size of the area would be increased by 4,000 acres and the potential for a watershed divide, which is an ecologically manageable boundary, in the Mystic Pass, would be included. This alternative precludes the management of 4,000 acres of land under multiple-use principles that are optional through state ownership.

8. NATIONAL PARK INCLUDING PART OF THE TONZONA RIVER DRAINAGE

This alternative considers a Mount McKinley National Park that includes the area discussed in

section I of the statement and an additional 322,000 acres adjacent to the western edge of the proposal. The primary resources of the area are taiga and tundra lowlands.

IMPACTS

This alternative would change the status of 322,000 acres of d-1, regional deficiency, and State selected lands to National Park System. The effects of this alternative would be about the same as those discussed in section III of this statement. However, the size of the proposal area would be increased by 322,000 acres and the potential for protection of the resources in the taiga and tundra lowlands will be included. This alternative precludes the management of 322,000 acres of land under multiple-use principles that are optional under Federal, State, and Native ownership. This alternative would have some adverse effect on future subsistence uses in the Tonzona River drainage, primarily related to caribou hunting. Also affected would be several game hunting guides, primarily from Anchorage and McGrath, who would be forced to move their operations to other locations. One of the resources that would receive potential protection as a result of this alternative are some Dall sheep ranges that were not included in the discussion in section III. This proposal precludes the further development of an identified mineralized area in the Tonzona River basin which includes the Purkeypile Mine. This alternative would add to the park an area with high recreational potential in the Amos Lakes, the three of which provide a scenic alpine-like setting and opportunity for various types of recreation.

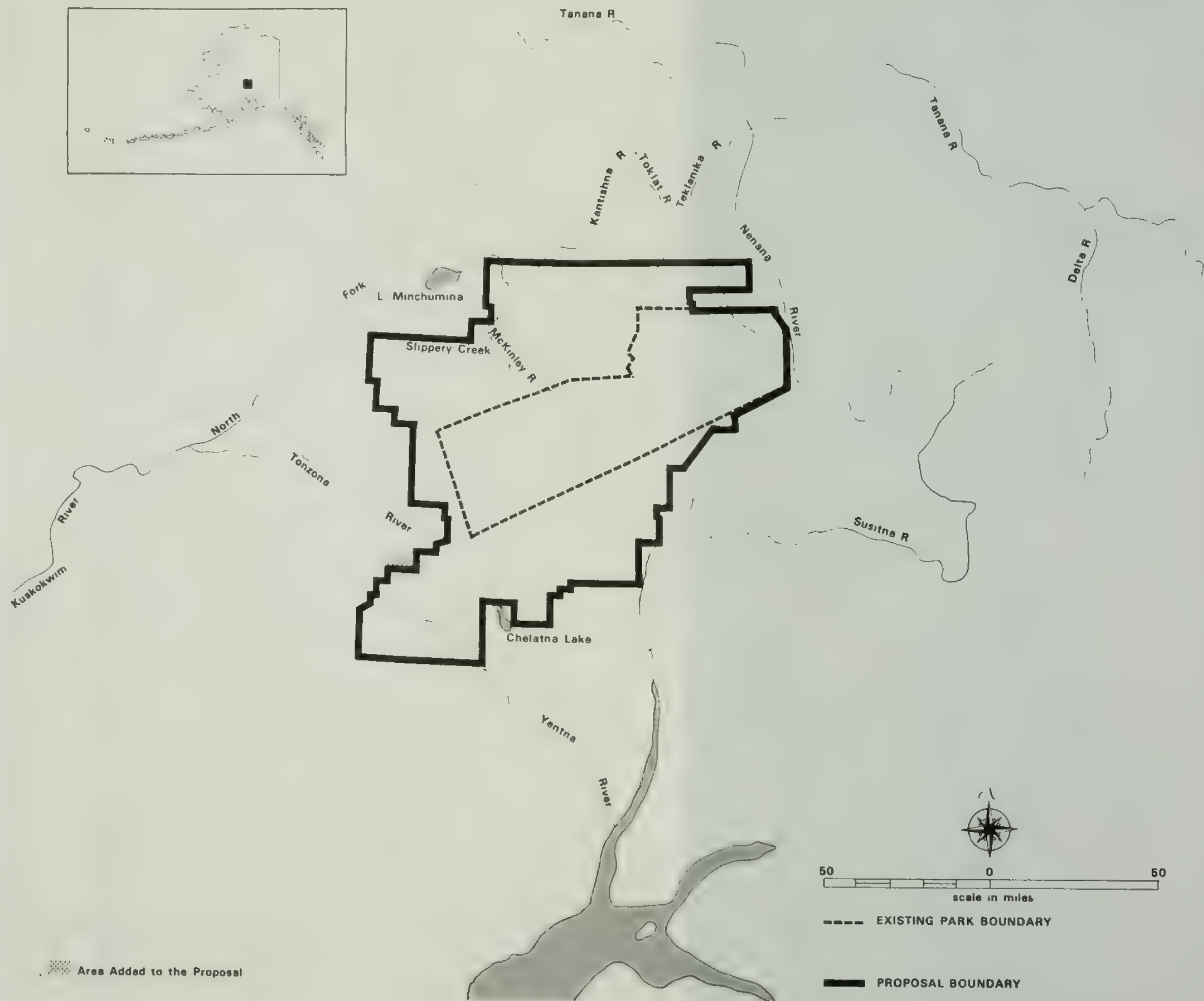
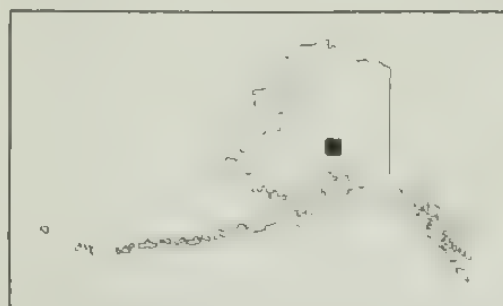
9. NATIONAL PARK INCLUDING LAKE CHELATNA AREA

This alternative considers a Mount McKinley

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ALTERNATIVE B-7

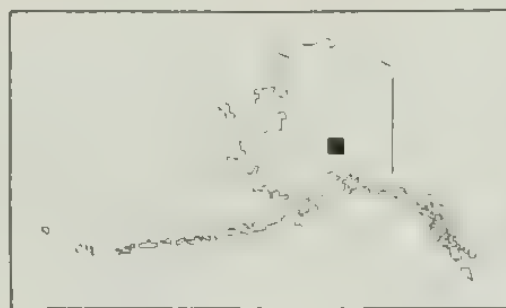


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ALTERNATIVE B-8



National Park that includes the proposal discussed in section I of the statement and an additional 112,000 acres of land adjacent to the southern boundary of that proposal. The addition is one of five areas of ecological concern identified in section I and is classified as State selection pending lands. The primary resources of the additional lands include Sunflower Basin (a fall moose concentration area), Chelatna Lake, and lands peripheral to Kahiltna Glacier.

Fish in Chelatna Lake include trout, grayling, red salmon, ling cod, rainbow trout, and white fish. The two latter species are not known to occur elsewhere within the proposal. Wildlife resources within the additional lands include grizzly bears and winter moose range with relatively large populations of moose.

Chelatna Lake offers the best of the suitable sites in the region south of the Alaska Range for water-based interpretive and recreational activities and facilities. It is the best example of a glacier-formed lake in the area.

Topography of the additional lands of this alternative readily lends itself to the development of short, scenic hiking trails, and for trail heads into the higher mountain wilderness of the lower slopes of Mount McKinley.

The additional area covered by this alternative includes 38 privately owned tracts--8 year-round residences plus 30 seasonally occupied cottages. These private lands total 1,325 acres.

IMPACTS

This alternative would change the status of 112,000 acres of State selection pending land to National Park System. The effects of this alternative would be about the same as those discussed in section III of the statement. However,

the size of the proposal would be increased by 112,000 acres of land and the potential for the protection of moose and grizzly bear range surrounding Lake Chelatna will be included. This alternative would preclude the management of 112,000 acres of land under multiple-use principles. In this case, the options affected would be those allowed under State ownership. This would have immediate effects on owners of eight year-round residences and the users of 30 seasonally occupied cottages. Mineral development would be precluded, subject to valid existing rights. This alternative would close an area to sport hunting that is currently popular for the taking of moose and grizzly bear. This alternative would provide an optimum location with existing access for administration, public use, and visitor services in the southwestern sector of the proposed southern addition to the existing park.

10. NATIONAL PARK INCLUDING COLLINSVILLE AND PETERS HILLS--DUTCH HILLS AREA

This alternative considers a Mount McKinley National Park that includes the proposal discussed in section I of the statement and an additional 700,000 acres of land adjacent to the southern boundary of that proposal. This additional area includes the additional area discussed under the previous alternative: National Park including Lake Chelatna area. The additional area included in this alternative is primarily lowland area below 2,000 feet elevation, although some of the land rises to nearly 5,000 feet in places. The Lake Chelatna area of this alternative proposal is one of five areas of ecological concern identified in section I.

IMPACTS

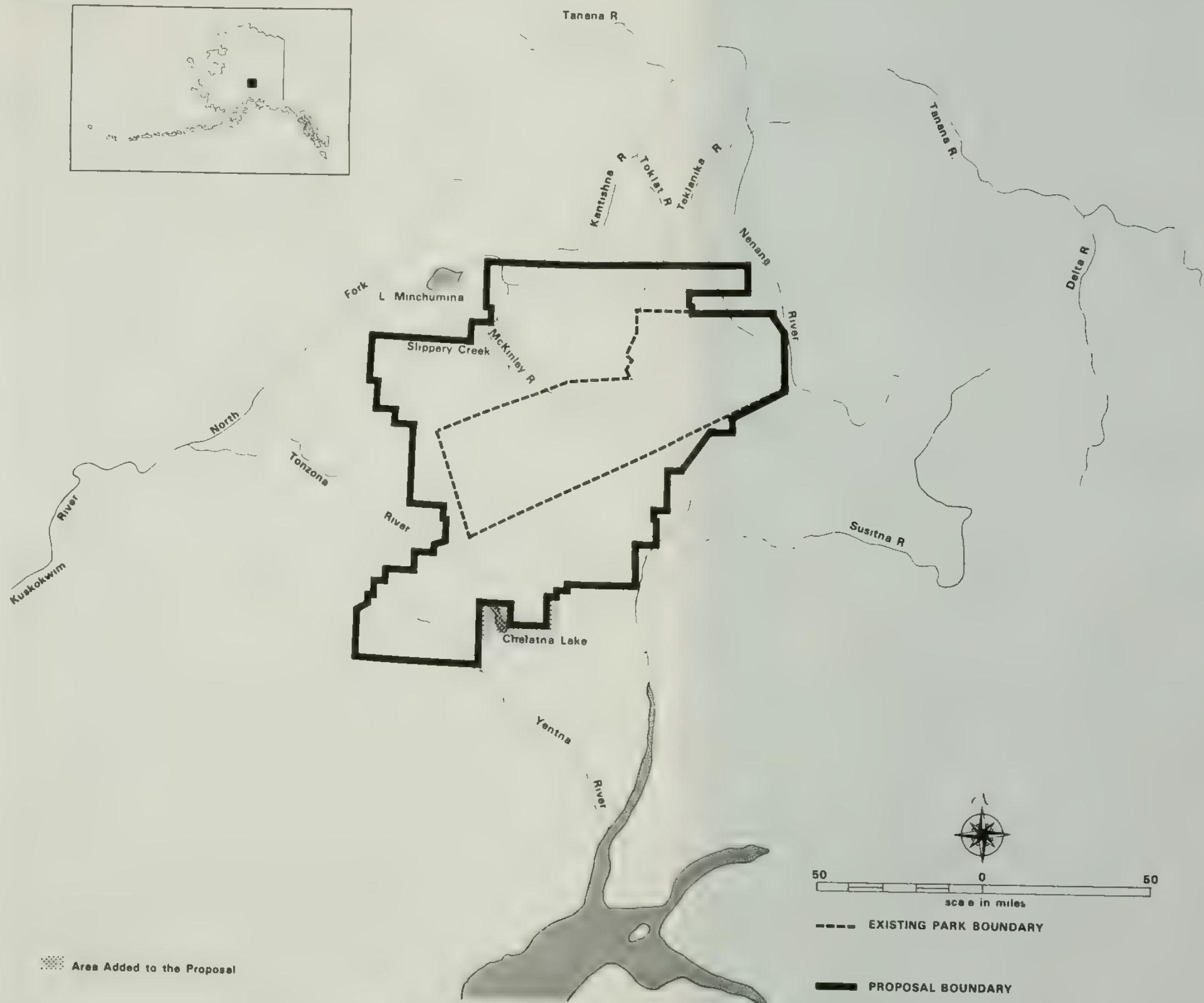
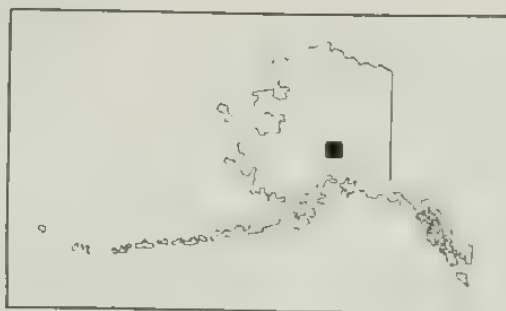
This alternative would change the status of 700,000 acres of State selection pending lands to

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ALTERNATIVE B-9



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ALTERNATIVE B-10



National Park System. The effects of this alternative would be about the same as those discussed in section III of the statement, including the following. The size of the proposal would be increased by 700,000 acres of land. The potential for the protection of 112,000 acres of land with moose and grizzly bear range surrounding Lake Chelatna, and 588,000 other acres of lowland resources would be included. This alternative would preclude the management of 112,000 acres of land under multiple-use principles. In the case of this alternative, the options affected would be those allowed under State ownership and would have a potentially high economic effect on the region and the State-resulting from the curtailment of mining and recreational activities. The Peters Hills-Dutch Hills and Collinsville mining areas would not be available for exploration and development. There would be no potential for additional recreational homesite development in the upper reaches of the Susitna lowlands. Where this alternative would produce a number of effects beneficial to the natural environment, it could have great impacts upon construction and mining industries, materials suppliers, and the State and local tax bases through loss of revenue.

11. NATIONAL PARK INCLUDING DENALI STATE PARK

This alternative considers a Mount McKinley National Park that includes the proposal discussed in section I of this statement and an additional 282,000 acres which comprise the existing Denali State Park. Curry Ridge, the major physiographic feature within the park, offers perhaps the finest location from which to view Mount McKinley and the Alaska Range from the south. The Matanuska-Susitna Borough has title to 19,775 acres and there are 3,895 acres in private ownership within the park.

IMPACTS

This alternative would change the status of 282,000 acres of State Park lands to National Park System. The effects of this alternative would be about the same as those discussed in section III of the statement. The size of the proposal would be increased by 282,000 acres. The impact on the natural environment would probably have no material effects as a result of changing status of the addition, covered by the alternative, from State to Federal control. Some options of management that would be changed include elimination of private and borough land uses and preclusion of hunting, permitted in the State park. There are no known mineral deposits in the area. This alternative would place the proposed Denali Dam and Reservoir, access areas for the proposed Denali and Devil Canyon Dams, and potential intertie routes within the park, significantly reducing future consideration of the Upper Susitna hydroelectric resources. Other adverse effects would be on the viability of the State Park system since Denali State Park is perhaps Alaska's foremost State park in terms of potential tourist interest and use.

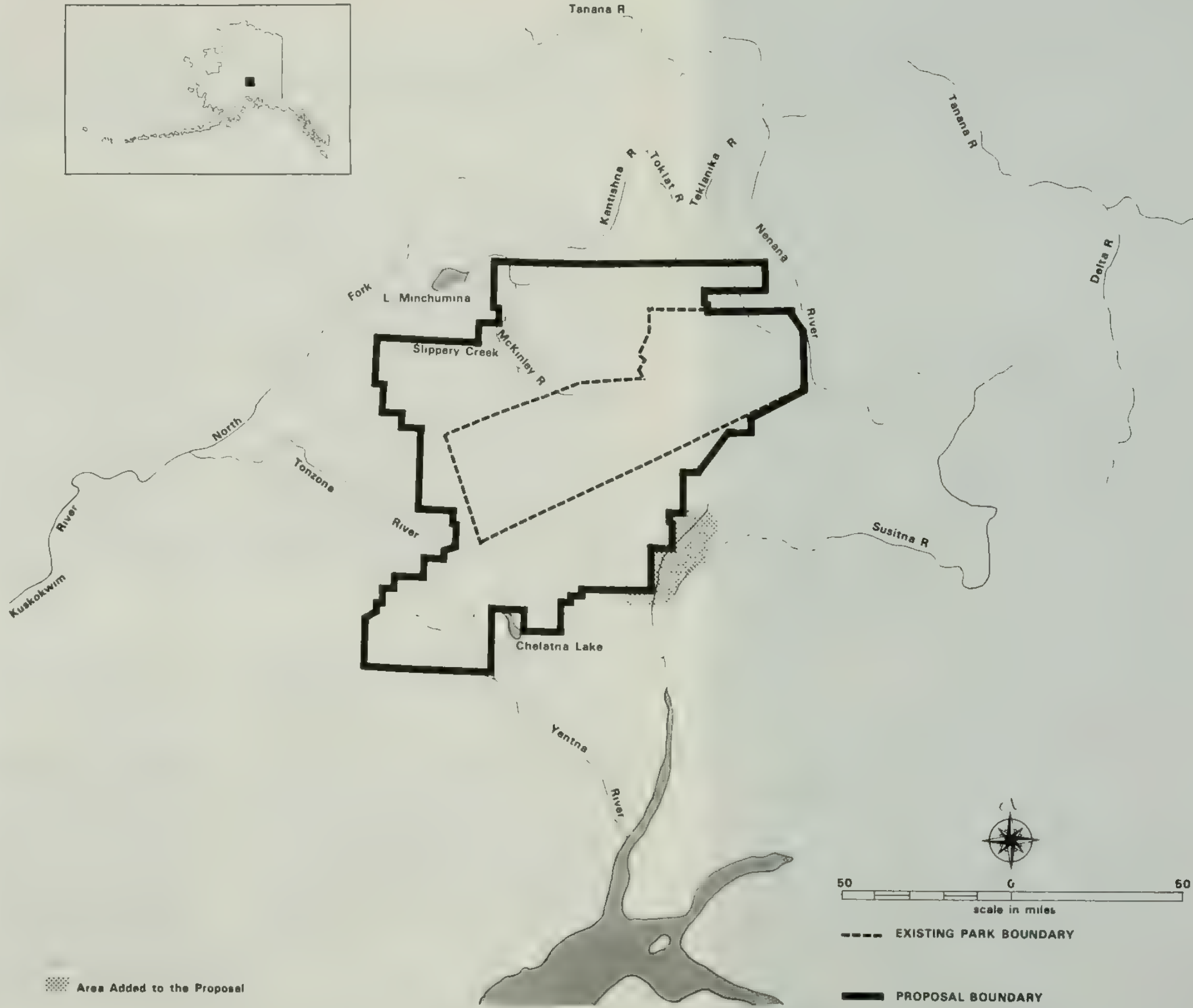
12. NATIONAL PARK INCLUDING LANDS FROM THE CANTWELL NATIVE VILLAGE WITHDRAWAL NOT SELECTED BY NATIVES

This alternative considers a Mount McKinley National Park that includes the proposal discussed in section I of this statement with changes in the park boundary to include within the park lands from the Cantwell Native village withdrawal that are not selected by Natives. The additional lands are adjacent to the southeastern corner of the existing park boundary and are northwest of the village of Cantwell. They are included in the Cooperative Planning and Management Zone discussed in section I and are also identified as an area of ecological concern. The additional area of this alternative lies on the slope of a small range

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ALTERNATIVE B-11



of hills and drains into the existing park. The village of Cantwell and the Ahtna Corporation have expressed their desire that the park lands about their lands.

IMPACTS

This alternative would change the status of an undetermined number of acres of land from unselected Native withdrawal to that of National Park System. This alternative would preclude the management of these unselected lands under the principles of multiple use. The impacts on the environment would be about the same as those discussed in section III of this statement but the potential for the protection of resources, especially the early summer post-calving caribou habitats, on the additional lands will be included. There are no known mineral deposits in the additional lands. This proposal would not materially affect subsistence hunting. It could complicate management of the park if Native selections of land are made in checkerboard fashion.

13. NATIONAL PARK INCLUDING THE GOLDEN ZONE AND PARTS OF BROAD PASS

This alternative considers a Mount McKinley National Park that includes the proposal discussed in section I of this statement with changes in the park boundary to include 200,000 acres of land in the Golden Zone and parts of Broad Pass. The additional area is located south of the park boundary proposal in section I. The primary resources are the mineralized Golden Zone and large expanses of relatively level flat land in Broad Pass. This area is comprised of d-1, State selected, tentatively approved, patented, and Native village withdrawal lands. This alternative includes lands discussed under the alternative of a national park

including lands from the Cantwell Native village withdrawal not selected by Natives.

IMPACTS

This alternative would change the status of 200,000 acres of d-1, State selected, tentatively approved, patented, and Native village withdrawal lands to National Park System. This would preclude the management of this alternative park addition under principles of multiple use. It would preclude the options of multiple use as allowed under each of the previous and potential managers mentioned in the description of this alternative. The impacts on the environment would be about the same as those discussed in section III of this statement, but the potential for the protection of additional critical early summer post-calving caribou habitat and scenic character of scenic lands will be included. This alternative would have an adverse effect on the economy through the elimination of mining activities and private development potentials in the area of the addition.

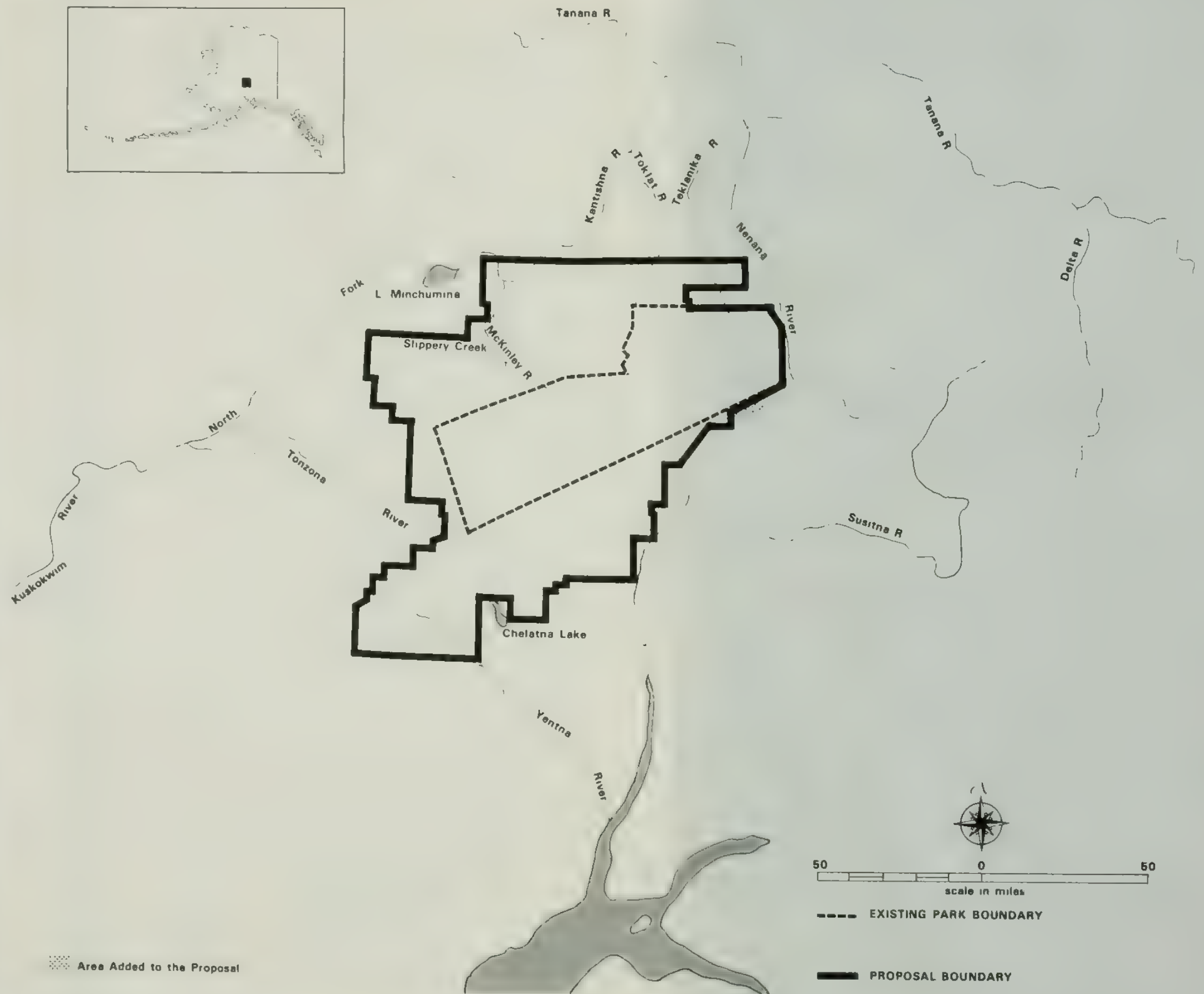
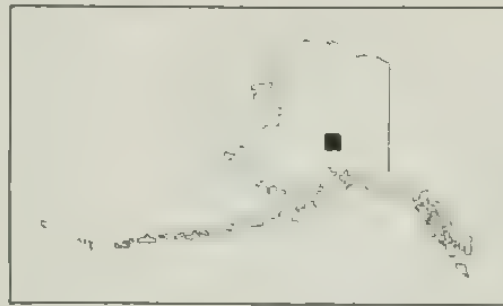
14. NATIONAL PARK INCLUDING ALL LANDS BETWEEN THE CREST OF THE TALKEETNA AND THE PROPOSED SOUTH ADDITION

This alternative considers a Mount McKinley National Park that includes the proposal discussed in section I of this statement with changes in the park boundary to include all lands between the crest of the Talkeetna Range and the proposed south addition. This addition of about 1.8 million acres is comprised of d-1, State, and Native village lands. It includes all lands discussed under Alternative 9, 10, 11, 12 and 13 as well as additional land.

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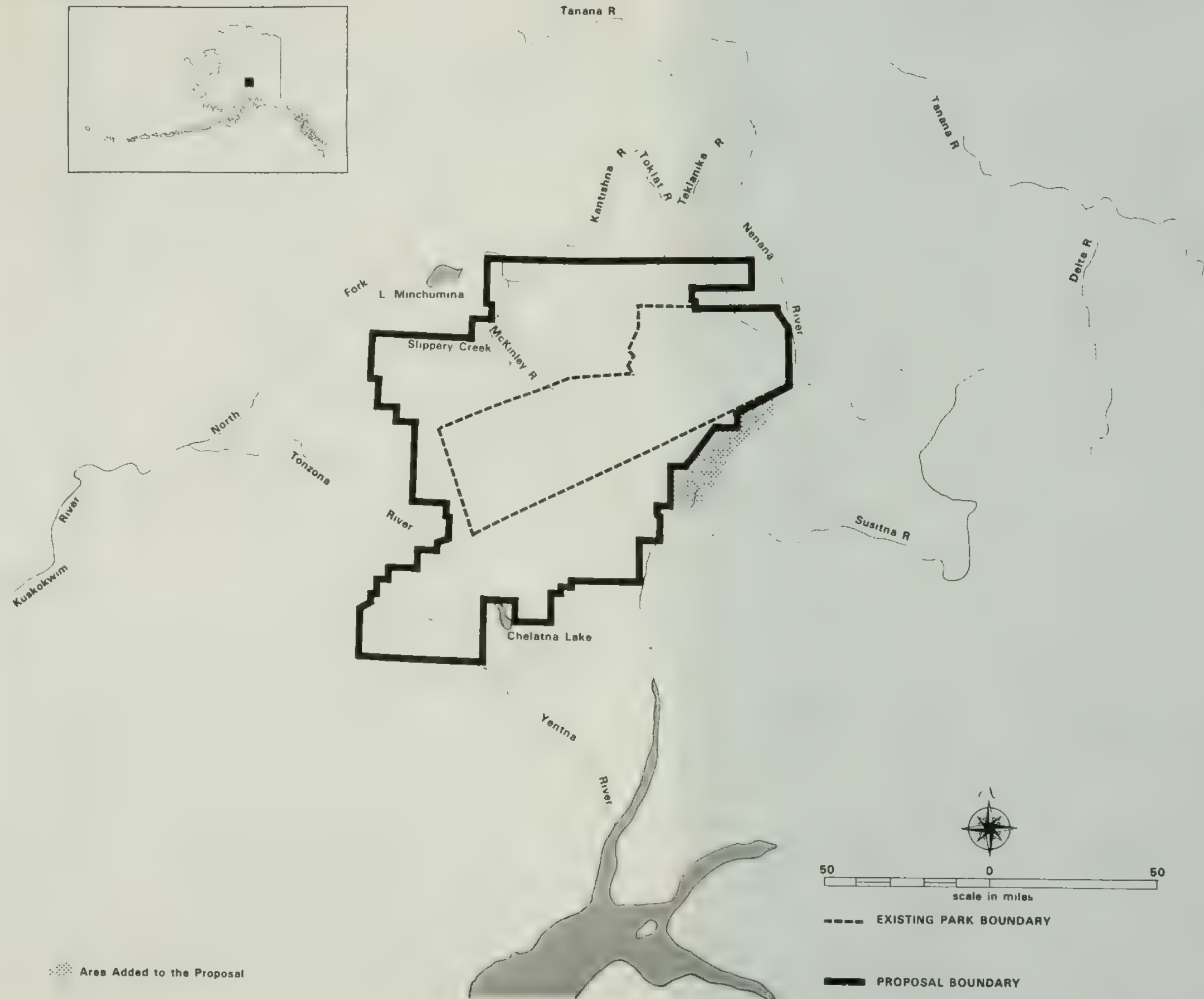


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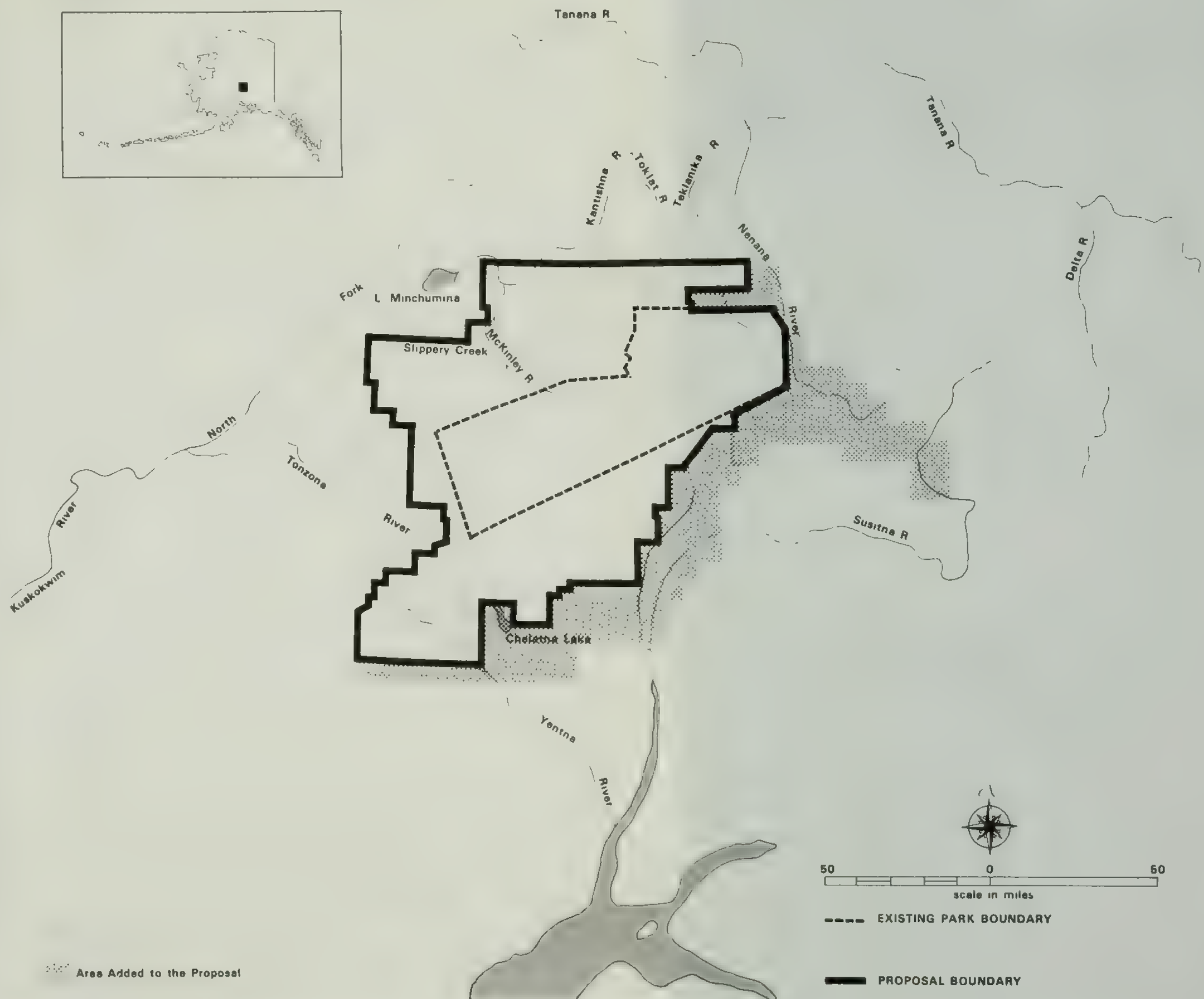


ALTERNATIVE B-13



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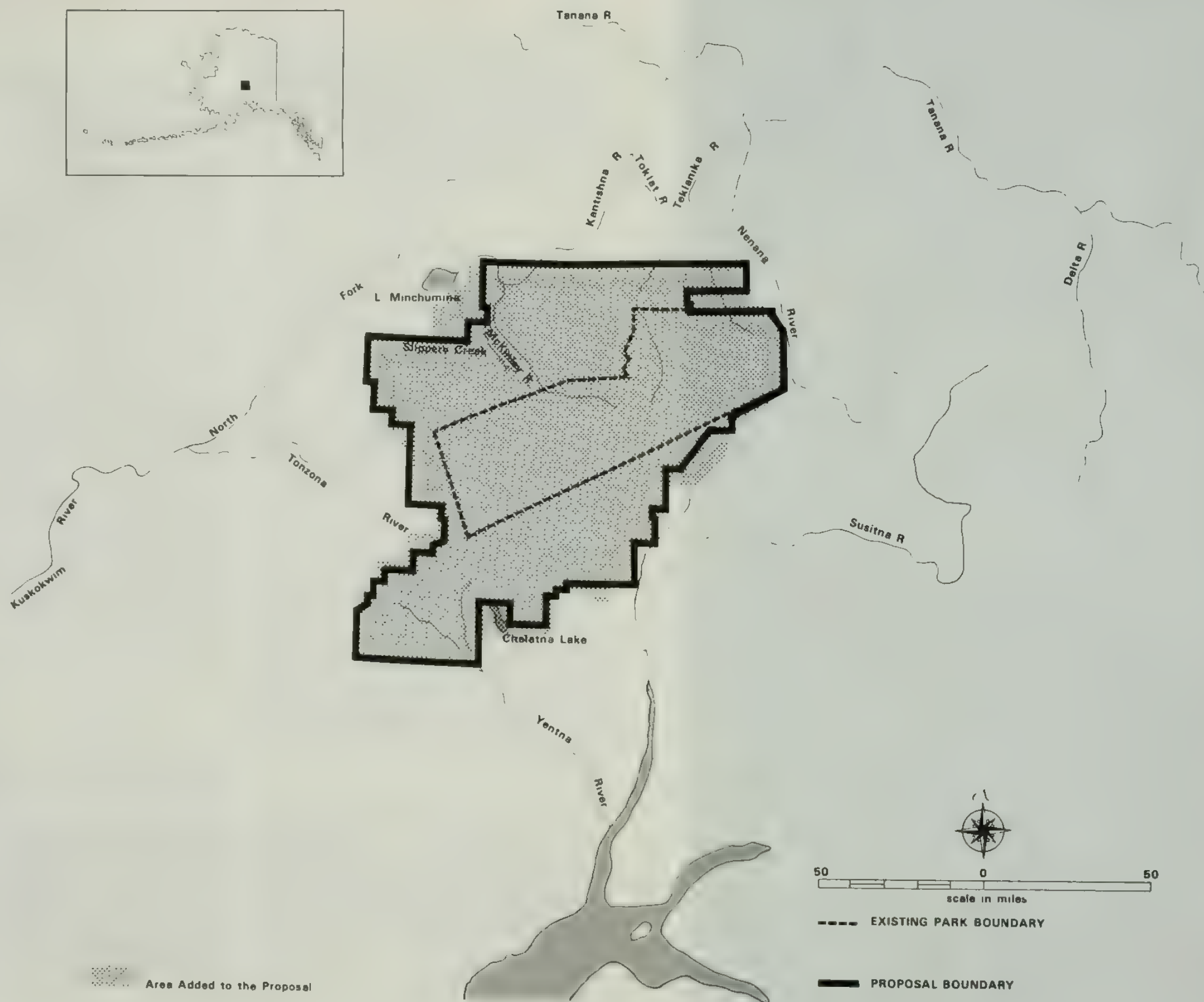
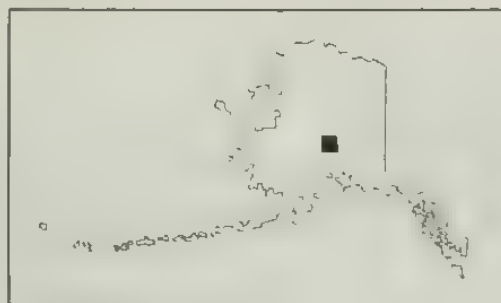


Area Added to the Proposal

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IMPACTS

This alternative would change the status of 1.8 million acres of d-1, State, and Native village lands to National Park System. The impacts will be the same as those discussed in section III of the statement and alternatives 9 through 13, plus the following: inclusion of the additional lands under this alternative would preclude the multi-objective planning and development of the Cooperative Planning and Management Zone discussed in section I of the statement, and the towns of Cantwell and Healy would have to be based on an essentially no-growth economy. This alternative would place access and transmission routes near the proposed Devil Canyon damsite within the park and may have significant impact on consideration of that project. In addition, an area identified by the Soil Conservation Service, USDA, as having agricultural potential would be precluded from use. The effects upon the natural environment of the additional area would probably be less adverse than the trend toward development, as currently indicated under the present multiple-use management of the area. The foreground area between the Anchorage-Fairbanks Highway and the Alaska Range would remain in its natural state. Addition of the crest of the Talkeetna Range might increase diversity of wildlife in the park by adding mountain goat habitat.

15. NATIONAL PARK INCLUDING LANDS TO THE SOUTH, EAST, AND WEST OF THE PROPOSED PARK

This alternative considers a Mount McKinley National Park that includes the proposal discussed in section I of this document with changes in the park boundary to include the northern slopes of the Outer Range, marshlands to the south and east of Lake Minchumina, Mystic Pass, part of the Tonzona River drainage, the Chelatna Lake area, part of Denali State Park, and part of the Golden

Zone. This addition is comprised of State, d-1, and regional deficiency lands, and totals about 4.2 million acres. It includes lands discussed in alternatives 5, 7 and 9, parts of areas discussed in alternatives 8, 11, and 13, and alternative 6 plus additional area surrounding Lake Minchumina.

IMPACTS

This alternative, which would include basically all of the Areas of Ecological Concern discussed in section I, would have the impact of the proposal plus the additional beneficial impact on the wildlife of the area in providing NPS protection to nearly complete habitats for many species. The ecological manageability of wolf, caribou, moose and other species would be greatly enhanced, as discussed in alternatives 5, 6, 7, 8, 9, 11 and 13, with the additional consideration of adding a portion of an important wetland ecosystem including fur-bearer, waterfowl and moose concentration area around Lake Minchumina. The total park area would be benefited by the inclusion of both Chelatna Lake and the Amos Lakes with their high recreational potential.

Adverse impacts, as discussed in the alternatives listed above, would include loss of mineral development of unknown potential in the Purkeypile, Golden Zone and Outer Range areas, as well as significant adverse impact on proposed hydroelectric sites and transmission routes.

C. ALTERNATIVE MANAGEMENT CONCEPTS

In addition to the proposed management concept described in section I, two basic management philosophies were examined in relationship to the Mount McKinley region: (1) multiple use, and (2) primary use.

1. MULTIPLE-USE MANAGEMENT

The entire region could be managed under a general multiple-use management concept.

"Multiple use" means: the management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform the changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.

"Sustained yield of the several products and services" means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land." (USFS, 1974)

The Mount McKinley region has a wide variety of resources--its scenery, its relatively intact large mammal ecosystem, its minerals, and its value for recreation and tourism because of its scenery and ecosystem. The region is geologically and biologically diverse. The demands being made upon the lands are equally diverse.

The primary advantages of multiple-use management include economic diversity within the region (provided there is a wide variety of resources available) and the ability to adjust resource utilization in relationship to changing demands over long periods of time.

In the Mount McKinley region, application of this concept would prove to be extremely difficult because, although the region has great resource diversity, there is relatively little potential resource use overlap.

Most areas of critical wildlife habitat have no known mineral value or recreational homesite potential in the foreseeable future. There are exceptions such as the potential conflicts between caribou summer range and development in the Cantwell area; between wolf pack range and potential recreational homesite development north of the existing park boundary near Healy; between scenic value preservation and homesite or commercial development in the Chelatna Lake area, along the Fairbanks-Anchorage Highway, and in Broad Pass; and between wildlife habitat and mining in the Kantishna area.

Multiple use in an area of such diverse resources could adversely affect the native wildlife populations. Conflicts of animals (such as bear) with man could lead to elimination of these animals from areas of intensive human use. Ranges of Dall sheep, caribou and wolf could be seriously encroached upon, to the ultimate permanent alteration and damage of the ecosystem.

Mount McKinley is rated as the number one tourist attraction in the State--conflicts between scenic attractiveness, mining, development, and recreational opportunity would adversely affect the tourist industry, one of the largest industries in the State.

2. PRIMARY-USE MANAGEMENT

Management under this system implies an analysis of all resources within the region in relationship to the needs of the localities, the region, the State, and the national interest. The result of such an analysis then leads to identification of that use

for every piece of land which has the greatest potential benefit to the society in all its parts. Conflicting uses are eliminated from each land unit: nonconflicting uses are allowed to occur.

Primary-use management, if applied to the entire region as one block of land rather than as a number of differing blocks of land, would result in the emphasis on utilization of one resource and the potential underutilization of other resources. There are a number of primary uses possible, the most feasible of which are discussed below:

PRIMARY USE (MINING)

Based on existing knowledge the important mineral areas would be as shown (Mineralized Areas map) in the "Description of the Environment," section II. These areas would be extensively explored and subsequently mined if economically extractable ores were discovered. The benefits to the local and State economy would be high but possibly short-term. If mining were carried on without environmental protection greater than is now required, the potential for scenic degradation, especially in the mineralized zone from the Golden Zone to the Collinsville area, would be high with adverse effects on tourism. This could be mitigated by stringent environmental controls, however.

Exploitation of the mineralized zones within the existing park north of the Alaska Range would have the greatest detrimental effects scenically. Secondly, the effect would be on the native wildlife populations, especially wolf and caribou, whose ranges are severely intruded upon. Water quality could be lowered. The effects would not be limited to the immediate vicinity of the mineralized zone. Ore trucks would need to use the existing park road which would require extensive upgrading of approximately 80 miles of that road through very difficult terrain with

extensive cutting and filling. The operation of the trucks could cause further disruption of wildlife distribution, especially grizzly bear, caribou (whose migration routes parallel the road in many places and cross it in others), and wolf (the road location bisects the territories of at least two packs).

Conflicts between mining and tourist activities would be greatest in this area, including visible scars on the Alaska Range foothills, competition on the road with mining vehicles, and reduced potential for wildlife observation.

Full-scale operations in the Kantishna and Stampede areas would either further compound the problems discussed above or require a road connection to the north and east to connect with the Anchorage-Fairbanks Highway, thereby further disrupting wildlife populations, but increasing ease of access to the area for other uses.

Mining as the primary use could allow many secondary uses within the region in areas with little or no mineral potential. These uses, depending on where they were allowed to occur, may or may not have further adverse effect upon the environment. Hunting, if allowed, would increase recreational opportunities for regional sportsmen, but might prove detrimental to wildlife observation by nonhunters. Recreational homesites could be accommodated in selected areas with little adverse effect on the overall regional environment. However, in "view" areas between the Anchorage-Fairbanks Highway and the mountains, and within the prime wildlife ranges to the north, such development could have serious adverse effects.

PRIMARY USE (INTENSIVE RECREATION)

The entire region could be managed with the dominant use as high intensity recreation

incorporating such uses as recreational homesites, ski areas, pleasure driving roads, lodges, automobile campgrounds, etc. The varied character of the landscape suggests many possibilities. Feasible sites for ski areas exist on Curry Ridge and the south side of the Alaska Range. From potential access and topographic points of view many of these possibilities coincide with mineral potential areas, especially on the south side of the Alaska Range and in the Kantishna. Development of such sites in the Kantishna area would create the need for improvement of access with resultant high adverse impacts on scenic values and major wildlife range.

Any recreational homesite development in suitable areas north of the Alaska Range would result in adverse impacts on wildlife populations, primarily wolf. Haphazard extensive developments in Windy Pass would have significant adverse impacts upon the scenic values of the canyon from the Alaska Railroad and the Anchorage-Fairbanks Highway.

Such development on the south side of the Alaska Range, depending upon precise location, could result in adverse impacts on the scenic qualities of the area.

In any area, recreational homesite developments could have potential adverse impacts resulting from construction of access roads and from sewage and garbage disposal. In any area which has heavy bear populations, dangerous bear-man conflicts with resultant loss of bear population would result. The areas around Chelatna Lake and those adjacent to the Alaska Range on the north side are examples of where this impact would likely occur. Little is known about actual bear concentration and range areas, thus limiting in-depth analysis of such impacts.

A number of potential scenic road corridors exist, some of the most scenically varied and esthetically pleasing being through the Toklat River Canyon,

through the Outer Range, west from Wonder Lake along the north side of the Alaska Range, a connection from Kantishna to Healy north of the Outer Range, and from Talkeetna to the Peters and Dutch Hills.

The first three would have a high degree of adverse impacts on wolf and bear ranges and would either cut or follow known caribou migration routes. Human presence associated with these roads would discourage wildlife use of the area, reducing range available to them and causing disruption of animal movements.

Construction of these roads by others would probably require upgrading of the existing park road with resultant cuts, fills, altered drainage patterns, and increased noise. These roads would penetrate areas which presently have no road penetration and provide more convenient access to lands suitable for recreational homesites. Exceptions are existing roads from Talkeetna to Peters and Dutch Hills and a truck trail from Healy to the Stampede area.

Intensive recreation as the primary use could have potential beneficial economic effects. The construction efforts required to build access routes and recreational facilities would provide short-term economic benefits in the region and the State. Year-round and seasonal employment would rise, providing long-term economic benefits. Such development might increase the tourism potential to a limited degree. Sale of recreational homesites would provide immediate financial gain to the State of Alaska.

PRIMARY USE (WILDLIFE)

This concept would place ecosystem preservation and wildlife management as the dominant criteria for consideration of other types of use. Continued mining in the Kantishna area would probably have

little further effect upon wildlife populations. However, historic levels of wildlife use of the area would not occur. Mining activities to the south of the Alaska Range, in identified mineralized areas, would probably have little effect on important wildlife populations with the exception of possible conflicts with caribou calving and summer range areas in the northeastern end of the Golden Zone.

Recreational activities of all types could be allowed, provided they did not drastically affect animal populations. Skiing, hiking, pleasure driving, camping, etc., could all occur in carefully selected areas. However, it is probable that such activities could not be allowed in the near future until definitive research on wildlife ranges, ecological interrelationships, and resource vitality are accomplished.

It is possible that some wildlife populations, such as moose and waterfowl, on the south side of the Alaska Range could be increased, by habitat manipulation, which would provide greater opportunities for hunting than are now available.

The lakes area to the south and east of lakes Minchumina and Chilchukebena are important waterfowl habitat for swans, geese, and ducks. Management under this alternative could assure protection of these populations.

It is possible, though not probable in the foreseeable future, that habitat manipulation would need to be undertaken for wildlife management purposes. Such manipulation would be more likely to occur north of the range rather than to the south, except for the waterfowl area in the north, since habitat lending itself to manipulation aimed at increasing wildlife populations does not occur on most of the lands within the proposed area south of the range.

Air and water pollutants would most likely not

be a problem under this type of management unless incompatible high intensity uses were allowed.

The economy of the region would remain at approximately the status quo under this form of management, with moderate potential for increased tourism to observe concentrations, brought about by habitat manipulation, of certain wildlife species.

D. ALTERNATIVES TO THE PROPOSED MASTER PLAN

The plan attempts to provide accurate interpretation of National Park Service Administrative Policies for Natural Areas (National Park Service, 1970) applicable to Mount McKinley National Park. Following are discussions of the alternatives considered for the proposals in the Master Plan.

1. DEVELOPMENT FOR PUBLIC USE

MORE INTENSIVE DEVELOPMENT

This action would commit a larger portion of the natural resources of the park to accommodation of greater amounts of development, more activities, and greater numbers of visitors. Such development would be more costly to develop and maintain. Accommodation of more intensive use would increase the potential pollution of air, water, and scenic resources; decrease habitat available for wildlife; and increase undesirable human interactions (crowding and safety of visitors). More intensive development could commit additional acreage to drastic change in areas which there is presently insufficient ecological information to assess long-term effects of developments on primary resources. Additional development proposals in the south addition at

this time would negate much of the purposes and function of the Cooperative Planning and Management Zone.

LESS INTENSIVE DEVELOPMENT

This alternative would not allow maximum utilization of resources of public use and enjoyment which are considered tolerable under present knowledge. Lack of adequate facilities could increase litter and water pollution. Lack of essential facilities and services would decrease individual enjoyment and appreciation of the park. Greater amounts of land would be unaltered and impact on wildlife would be less than under the present proposal.

2. NO INTERPRETIVE PROGRAM

Having no interpretive program would largely affect educational aspects but there are also impacts on the natural environment. The educational impacts relate to the visitor's experience. Having no interpretive program would result in the dissemination of less information about the park or the region than if there were an interpretive program. There would not be programs readily available to explain the resources within the park, tell ways in which they could be used, or detail the interrelationships between the resources. The history of the park, Mount McKinley, and man's use of the area from prehistoric times to the present would not be readily available to visitors to the area.

An interpretive program would require some facilities and development which would have localized adverse environmental effects. Minor air pollution from campfires, etc., and increased interaction with animal populations would probably result. However, an increased awareness of ecosystem dynamics and heightened

appreciation of the natural environment would be mitigating factors, and might well outweigh adverse effects.

3. NATURAL RESOURCES MANAGEMENT

An alternative to a natural resources management program designed to limit use to levels which do not lead to progressive resource degradation is a program which allows such degradation. This alternative would lead to progressive deterioration of plant, animal, and scenic resources resulting in loss of the natural wildlife values of the park. These values are a part of the reason for which the park originally was established. Impacts would be similar to those discussed earlier for the alternative of allowing more intensive use of the northern part of the park.

IX. CONSULTATION AND COORDINATION WITH OTHERS

A. CONSULTATION AND COORDINATION IN THE DEVELOPMENT OF THE PROPOSAL AND THE PREPARATION OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

The following individuals and organizations were consulted in gathering information to supplement published materials.

Information Office, Alaska Railroad
Robert Cross, River Basin Planner,
Alaska Power Administration
Leslie Viereck, Principal Plant Ecologist,
U.S. Forest Service, Forestry Services
Laboratory
Institute of Northern Forestry, Pacific
Northwest
Forest and Range Experiment Station
Richard Bishop, Research Coordinator,
Alaska Department of Fish and Game
George A. Hall, Division of Planning,
Alaska Division of State Parks
Kurt Rein, Forester, Alaska Department
of Natural Resources
Mike Smith, Chief of Habitat,
Alaska Department of Fish and Game
John Trent, Game Biologist,
Alaska Department of Fish and Game
Fred Dean, Head, Department of Wildlife and
and Fisheries, University of Alaska
Wyatt, Gilbert, Assistant Professor, Geology
Department, University of Alaska
James E. Morrow, Professor of Zoology,
College of Biological Sciences and
Renewable Resources, University of Alaska
Fred Anderson, Commercial Fisheries Biologist,
Fairbanks, Alaska Department of Fish and
Game
Pete Cizmich, Habitat Coordinator,
Anchorage, Alaska Department of Fish and
Game
Scott Grundy, Habitat,
Fairbanks, Alaska Department of Fish and
Game
Ken Kramer, Game Biologist

Anchorage, Alaska Department of Fish
and Game
Gene Roguski, Sport Fish Biologist,
Fairbanks, Alaska Department of Fish
and Game
Pamela Rich, Research Assistant, Institute
of Social, Governmental and Economic
Research, University of Alaska
Art Davidson, Alaska Representative, John
Muir Institute and mountain climber
Marc Ganapole, Anchorage Center for the
Environment
Gordon Haber, Research Biologist, Department
Zoology, the University of British
Columbia
Chalon Harris, Denali Flying Service, Mount
McKinley National Park
Celia Hunter, Co-owner, Camp Denali and
Commissioner, Joint Federal-State
Use Planning Commission
James Hunter, President, Fairbanks
Environmental Center
Robert Jencks, Land Use Planning Consultant to
Tanana Chiefs Conference
James Kowalsky, Friends of the Earth
Representative, Fairbanks
Graham Mower, Owner, Chelatna Lake Lodge
Adolph Murie, Biologist (retired), Moose,
Wyoming
Deborah Vogt, Fairbanks Environmental Center
Ginny Wood, Co-owner, Camp Denali

Section II of this statement was sent to the following organizations and individuals for their review and comment on January 22, 1973, to attempt to insure factual content of the environmental statement. Comments received have been incorporated into the statement. Those from which comments were received are marked with an asterisk (*).

FEDERAL AGENCIES:

District Engineer, Alaska District, Corps of
Engineers
Leader, Alaska Task Force, Bureau of

Outdoor Recreation

*Division Engineer, Federal Highway
Administration

Department of Transportation

*Barney Coster, Forest Service

*State Director, Bureau of Land Management
USDI

*Area Director, Bureau of Sport Fisheries
and Wildlife, USDI

*Director, U.S. Geological Survey

*Regional Director, National Marine
Fisheries Service, U.S. Department of
Commerce

*Area Director, Bureau of Indian Affairs

*Alaska Field Operation Center, Bureau of
Mines, USDI

Superintendent, Anchorage Agency, Bureau
of Indian Affairs, USDI

*Federal Co-chairman, Joint Federal-State
Land Use
Planning Commission

*Administrator, Alaska Power Administration
USDI

Field Representative, Alaska, Regional Office,
Federal Aviation Administration, DOT

STATE OF ALASKA

Office of the Governor, Director of Planning
and Research

The Joint Federal-State Land Use Planning Commission held public hearings in Alaska and in the lower 48 States for the purpose of gaining public input in the planning process. Those hearings held in Alaska which were important to this proposal were at Anchorage, Fairbanks, and McGrath and were attended by the National Park Service. The hearings in Seattle, San Francisco, Denver, and Washington, D.C. were also attended. The testimony given at these hearings was considered in the development of the proposals and the environmental impact statement.

B. COORDINATION IN THE REVIEW OF THE DRAFT ENVIRONMENTAL STATEMENT

This draft environmental impact statement was sent to the following for review and comment. Comment upon the draft was received from those marked with an asterisk (*).

FEDERAL:

Department of the Interior

Bureau of Sport Fisheries and Wildlife

*Bureau of Mines

*Bureau of Indian Affairs

*Bureau of Land Management

*Geological Survey

*Alaska Power Administration

Bureau of Outdoor Recreation

Department of Transportation

*Federal Aviation Administration

The Alaska Railroad

*Federal Highway Administration

Department of Agriculture

*U.S. Forest Service

*Soil Conservation Service

Department of Defense

*Alaska Command

*Corps of Engineers

Advisory Council on Historic Preservation

*Environmental Protection Agency

STATE:

*Governor (State Clearing House)

State Liaison Officer, Historic Preservation

LOCAL GOVERNMENT:

Matanuska-Susitna Borough

Cantwell Village Council

City of McGrath

Nikolai Village Council

City of Nenana

City of Talkeetna

Telida Village Council

Medfra Village Council

NATIVE ORGANIZATIONS:

*Cook Inlet Native Regional Corporation

*Doyon, Inc.

Ahtna Corporation

Cantwell Native Village Corporation
McGrath Native Village Corporation
Nikolai Native Village Corporation
Telida Native Village Corporation
Medfra Native Village Corporation
Nenana Native Village Corporation
Alaska Federation of Natives
Alaska Native Foundation

ORGANIZATIONS:

Mountaineering Club of Alaska
*Sierra Club
*The Wilderness Society
The National Audubon Society
*National Wildlife Federation
*Friends of the Earth
National Parks and Conservation
Association
*Conservation Foundation
Alaska Professional Hunters Association
*Alaska Oil and Gas Association
Alaska Sportsmen's Council
Alaska Miners Association

C. CONSIDERATION OF THE PUBLIC REVIEW IN PREPARATION OF THE FINAL ENVIRONMENTAL STATEMENT

The draft statement was available for review from December 18, 1973, to July 22, 1974. A total of 230 letters were received on the draft environmental statement, 18 from Federal agencies, 2 from the State of Alaska, 2 from other governmental agencies, 3 from Native organizations, 30 from other organizations, and 175 from individuals.

Analysis of comments in the letters from individuals showed that 142 letters provided comments on the adequacy of the statement. Of those, 127 letters contained identical comments. The letter submitted by Mr. Billy C. Wallace has been printed to represent those 127 letters. In addition, 33 letters were received which did not speak to the adequacy of the statement but indicated only a position on the proposal or the

concepts of the four system studies. Letters submitted by Mr. Stevel L. Marquess and Mr. Berle E. Mercer have been printed to represent letters indicating only a position.

Comments in 15 letters raised substantive questions concerning the adequacy of the statement and are given particular consideration in the following pages. Other comments of a minor nature are included but are not responded to specifically. This applies particularly to factual data and editorial errors. The proposal or the alternatives are directed to the range of options indicated by interested parties whether proponent or opponent.

The proposal as now described in the statement has been prepared within Congressional and administrative mandates and has been adopted by the Secretary of the Interior and transmitted to Congress. The decision as to implementation of the proposal or any specific part of the proposal is a legislative one. Congress has until December 1978 to act upon the proposal before the law expires. Persons wishing to voice an opinion on the proposal will continue to have full public opportunity to do so through legislative channels.

INDEX OF CORRESPONDENCE RECEIVED, EXCEPT FOR LETTERS FROM INDIVIDUALS:

FEDERAL AGENCIES

Department of Agriculture
 Forest Service
 Soil Conservation Service
Department of Commerce
Department of Defense
 Alaska Command
 Chief of Engineers
Department of Health, Education, and
 and Welfare
Department of Housing and Urban
 Development
Department of the Interior
 Alaska Power Administration
 Bureau of Indian Affairs
 Bureau of Land Management
 Bureau of Mines
 Bureau of Reclamation
 Geological Survey
Department of Transportation
 Federal Aviation Administration
 Federal Highway Administration
Environmental Protection Agency
 Alaska Office
 Washington, D.C. Office
General Services Administration

STATE AGENCIES

Department of Natural Resources
Office of the Governor

OTHER GOVERNMENT AGENCIES

Fairbanks North Star Borough
Federal-State Land Use Planning
 Commission for Alaska

NATIVE ORGANIZATIONS

Cook Inlet Region, Inc.
Doyon, Ltd.

OTHER PLANNING ORGANIZATIONS

Fairbanks T.V.A. Development

ORGANIZATIONS

Alaska Center for the Environment
Alaska Conservation Society
 Tanana-Yukon Chapter
Alaska Geological Society
Alaska Oil and Gas Association

Alaska Wildlife Federation and Sportsmen's
 Council
Bryan Outdoor Resources Group
Business and Professional Women's Clubs,
 Inc.
The Conservation Foundation
Ecology Center of Southern California
Exxon Co., U.S.A.

Fairbanks Environmental Center and
 Friends of the Earth, Inc.
Inspiration Consolidated Copper Company
International Pacific Halibut Commission
International Pacific Salmon Fisheries
 Commission
National Association of Counties
National Society of Professional Engineers
National Wildlife Federation
Nature Conservancy
Northwestern University - Public Lands
 Project
Saguaro Ecology Club
Sierra Club
Society of American Foresters
 Alaska Chapter
 Juneau Chapter
 Sitka Chapter
University of Colorado Wilderness Study
 Group
University of Alaska
 Institute of Arctic Biology
 Institute of Social, Economic and
 Government Research
Wayne County Federation of Sportsmen's
 Clubs, Inc.
Western Wilderness Association
The Wilderness Society



UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
Washington, D.C. 20250



5510

JUL 22 1974

Mr. Theodor R. Swem, Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

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Dear Mr. Swem:

Here are our comments on the remaining 18 legislative proposals recommended by the Secretary of the Interior pursuant to the Alaska Native Claims Settlement Act (P.L. 92-203). Comments on the first six proposals were transmitted to you in June.

Our comments are organized in a "general comments" section which applies to all 28 proposed units of National Parks, Forests, Refuges, and Wild and Scenic Rivers and in "specific comments" sections covering each Park, Refuge and Wild & Scenic River proposals. We have not commented on the National Forest proposals since we will be involved in cooperating and assisting you in the preparation of the final statements for those.

We suggest that the general section of comments be included in the Final Environmental Statement of all the proposed units and the specific section be included only in the Statement to which it applies.

General Comments

Relationships Between Proposals

The 28 statements, in a sense, are related since they are a product of ANCSA. Collectively, the proposals create a significant impact not only on the State of Alaska as a whole but nationally as well. The individual statements describe the various impacts involved for that unit, however, the cumulative effect of the impacts of the several parks, forests, refuges and wild rivers is not discussed.

An example is the impact on sport hunting. Planning or curtailing hunting on one National Park may have a minor effect on guides, sportsmen and hunted populations whereas closing, carefully restricting or possibly closing eleven units within 10 years could have a major impact and could result in serious long-range consequences by directing intense hunting pressure into areas remaining open. Secondary effects on subsistence living could be severe. The State of Alaska can take steps on other lands to reduce possible adverse results but it should be forewarned by complete discussion of possible cumulative impacts.

In each instance where land is withdrawn from some form of current or recent public use (e.g., mining, entry, hunting, travel) an evaluation should be made in each Statement based on the assumption that many or all of the units will be approved so the impact of the individual proposal can be related to the other units in the legislative package.

The approval of 83 million acres of reserved Federal system lands is another example of cumulative impact that should be addressed. This action makes a long-term commitment of land and each unit should not be considered in isolation. It would be pertinent to point out in this regard that the ANCSA also makes a positive commitment of some 45 million acres to private (Native) ownership. In making the Settlement, the State of Alaska will be free to complete its 103.5 million acres entitlement -- another long-term allocation of Alaska land and resources. The part each unit plays in the total commitment to environmental quality, national economic development and regional development should be displayed so that the relationship of the proposals to the entire State can be more easily understood.

In this regard, some of the refuge proposals show the relationship of waterfowl populations to the entire North American continent. These kinds of relationships should be emphasized.

The geographic relationships of Federal reserves in Alaska should also be discussed. For example, the continuum of Park and Refuge status proposed through the Brooks Range from the Canadian border to the Chukchi Sea, broken only by 48 miles along the pipeline corridor and 16 miles at Noatak Village, should be discussed with relationship to the impact it may have on the future of the Arctic. These total impacts may be viewed positively or adversely but they should be revealed.

Additionally, the impact of these proposals on the management systems to which they are added should be discussed.

We plan to include such discussions in the Final Environmental Statements for National Forest proposals.

Multiple Use - Sustained Yield

The descriptions of multiple use given in the several statements vary in their accuracy and objectivity and, in several instances are conflicting. In addition to comments we have given in those specific instances we wish here to quote the definition of multiple use as contained in the Multiple Use-Sustained Yield Act of 1960 (P.L. 86-517) as well as the definition of sustained yield. Any discussion of this subject is incomplete without these definitions.

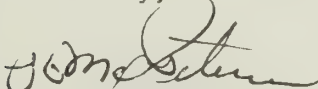
"Sec. 4. As used in this Act, the following terms shall have the following meanings:

(a) "Multiple use" means: The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform the changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.

(b) "Sustained yield of the several products and services" means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land."

We appreciate the opportunity to comment.

Sincerely,


R. MAX PETERSON
Deputy Chief

Enclosures

MT. MCKINLEY NATIONAL PARK PROPOSAL
(DES 73-83)

Specific Comments

1. The statement on page 2, "Two additions to the park, ... , are proposed to accomplish the purpose and original intent of Congress." is significant. It should be clarified with necessary citations made.

2. On page 5, it is stated that subsistence uses, if subsequently proven, will be recognized. A clearer definition of "subsistence uses" is needed and the means by which they may be proven should be defined.

3. The sections on minerals (page 76) and impacts on mineral development (page 143) are inadequate in light of recent reports. An example is the Bureau of Mines "Potential Mineral Resources in Selected D-2 Lands", June, 1973.

4. On page 111 and 135 the forest resources are considered. The following information has been provided by the Alaska Forest Survey Project, Pacific Northwest Forest and Range Experiment Station, and should be included:

The proposed northern extension includes a portion of an area inventoried by Forest Survey in 1973. About 160,000 acres are proposed for inclusion from this area. Of this acreage, about 19,000 acres are of commercial site carrying 200 million cubic feet of wood volume. Another 6,400 acres is in non-commercial forest stands, but carrying more than 800 cubic feet per acre. Volume in these non-commercial stands totals 8.5 million cubic feet. Alternative B-1 would exclude most of the commercial forest land.

5. On page 124, it is stated that, "Animals populations that are subject to hunting exhibit changes in genetic makeup" This is questionable and needs further clarification and citations.

6. In the impacts sections only the impacts of the additions to Mt. McKinley are considered in a limited context. No consideration is given to the overall impacts of adjacent primary use lands, proposed or existing. For example, much of the entire Alaska and Aleutian Range is proposed in one form or another for restrictive management. What effect or impact will the McKinley additions have in light of these other proposals. (See general comments)

7. On page 156, it is suggested that Congress could "at any time alter the management of the area, opening it to exploitation of resources, or even de-establish the park..." This is possibly true, but has little historical precedent. Further explanation is needed if this approach is to be considered viable.

8. The No Action Alternative, page 157, is incomplete. Recognition should be given to the fact that, if not placed in the four systems, the lands would revert back to d-1 status, pending some possible future classification. ANCSA specifies that any lands withdrawn under d-2 authorities not included in the four systems will be available for selection by the State and regional corporations, and for appropriation under the public land laws. Under the d-1 authorities the area could be classified for retention in Federal ownership under BLM multiple use

management, for selection or disposal under the existing land disposal authorities, for entry under some or all of the public land laws, or for some other system or purpose. All that is really known in the No Action Alternative is that the area will not be a park and will revert back to d-1 status. This indefinite status is, in itself, an impact of no action.

9. The Alternative Boundary Location Alternatives, page 158-201, consider a myriad of boundary adjustments -- some quite minor. This section would become more creditable if the number was reduced to the actual, feasible boundary location adjustments considered by the Secretary in his decision.

10. The multiple use management alternative, page 203, is inaccurate. See our general comments.

RESPONSE TO COMMENTS BY
DEPARTMENT OF AGRICULTURE
FOREST SERVICE

1. In passing the Alaska Native Claims Settlement Act of 1971, Congress itself gave very clear attention to the regional, State, and national effects of the Alaska land transfers necessary to provide Native claim settlement, to meet the outstanding requirements of Alaskan statehood, and to provide for the continuing administration of the public lands. It directed the Secretary to withdraw lands for Four Systems of National Parks, Forests, Wildlife Refuges and Wild and Scenic Rivers after other factors were taken into account in the planning process. And, Congress further provided for the establishment of a Joint Land Use Planning Commission and the orderly implementation of the planning process concerning areas planned and best suited for permanent reservation in Federal ownership. It called for recommendations to insure that economic growth and development was planned in an orderly and compatible way with State and national environmental objectives and the public interest in public lands, parks, forests, and wildlife refuges in Alaska, as well as the economic and social well being of the Native people and other residents of Alaska. And agreement was reached with the State on the general area of the Four System proposals more specifically set forth here. These considerations and steps were examined and implemented prior to the individual development of Federal proposals with finite boundary lines and acreage limits. The need to consider cumulative impacts was recognized also during the development of the environmental impact statements on the detailed proposals. The cumulative aspects of each proposal, where they could be detected with reasonable assurance of significance, are noted in the evaluations of that proposal. Appropriate analyses in the statements are developed on a regional basis for some proposals and in other cases, on a statewide or broader basis. It would be repetitive to undertake an additional EIS to the 28 already completed.

Anyone wishing to ascertain overall effect, may do so by reading the aggregate impact of all or part of the proposals that would be involved and considering them the same as the sum of the impact discussed in each of the environmental statements. The statements are being issued and are available on the basis of sets of (28) each. Where the total cumulative impact in a region or the State appears particularly significant in relationship to a given proposal, the

subject statements involved are modified to include any additional impact considerations not previously described among the analyses involved. It is the considered opinion of the Department that these foregoing actions and the statements themselves taken together do constitute a good faith effort at providing a fair and accurate evaluation of aggregate or cumulative impact on major regions, the State, and the Nation as a whole.

2. This definition is now included in the discussion of the multiple use alternative, Chapter VIII, section C.
3. These purposes were generated by the planning team and Park Service management based on the Act of August 25, 1916, establishing the National Park Service, the Act of 1917 establishing Mount McKinley National Park, and the park management policies of the NPS as expressed in Administrative Policies for Natural Areas of the National Park System.
4. The NPS recognizes the considerable controversy over this very important issue, and will not take unilateral action to either define or develop a management plan for subsistence activities. Our intent, as expressed in Chapter I, "Administrative Proposal" section, is to more fully study the subsistence issue with input from all interested parties, and in this way to formulate a plan which will permit the continuance of this activity and lifestyle in a manner consistent with the best interests of all, to the extent possible.
5. These sections have been extensively revised based on additional and more recent information from USGS and Bureau of Mines. See comments from these two agencies, this chapter.
6. The information provided in this comment has been included in "Forest Resources," Chapter II.
7. This statement has been qualified to reflect its theoretical nature. For a more complete discussion of this point, see the revised section of "Limiting Factors and Population Dynamics," Chapter II. An unhunted animal population, such as would be in large measure created by this proposal, would provide a control group of animals against which to compare a hunted population to prove or disprove the aforementioned theory.
8. This question is addressed in the response to comment 1, above.
9. Precedents for this action do exist. For example, Katmai National Monument was opened for the extraction of coal in World War II, and later for the extraction of pumice.

10. This information is correct and has been included in the No Action Alternative.
11. Although many of the alternatives are small in size compared to the area of the proposal, all have been assessed and considered.
12. See response to comment 2, above, for response.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

204 East 5th Avenue, Room 217, Anchorage, Alaska 99501

July 19, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

The twenty-eight draft environmental impact statements for inclusion of federally-owned lands into four national systems - The National Parks, Forests, Wildlife Refuges, and Wild and Scenic Rivers, addressed to the Soil Conservation Service, Washington, D. C., on December 28, 1973, were referred to the Soil Conservation Service, Anchorage, Alaska, for review and comment. This response and attached specific remarks represent all comments of the Soil Conservation Service for the twenty-one statements requested by July 22, 1974.

The task force that developed the proposals and environmental impact statements is commended. The statements represent considerable effort in the collection of available basic data and in effective presentation of numerous pertinent facts. The following general comments are presented for your consideration. We suggest that they be reproduced for distribution with the specific comments which are attached.

GENERAL COMMENTS

1. Use of soils information. Soils information available in the form of published soil surveys and in the recently completed "Exploratory Soil Survey", which is being prepared for publication by the Soil Conservation Service, contains specific and general soils information which would be useful in evaluating potential land uses. The National Cooperative Soil Survey is a continuing activity between the Department of Agriculture, the University of Alaska, and other state and federal agencies. More detailed information will be available over a period of time and should be used in developing more specific plans for the areas under consideration.

2. Alternative land uses. The range of choices for land uses on specific areas may be limited because of climate, soils, and topography. Where such choices do exist, the areas should be analyzed in terms of

tradeoffs (benefits foregone and benefits realized) under various potential land use choices and combinations. The short-term versus long-term impacts on both natural environment and human environmental needs from potential uses should be portrayed.

3. Options for future use. Even if archeological values, historic values, unique land forms, and fish, wildlife, and other natural environmental values may seem of highest priority at the present time, flexibility for accommodating different compatible uses in future years should be maintained. Research, experience, and needs of people will need to be evaluated periodically and changes in land use priorities considered. It appears that only those systems which propose multiple use can provide for a full range of agricultural activities should it be determined in the future that this is the highest and best use of the land.

4. Compatibility with land use plans. Land use plans for the State of Alaska are at an early development stage. A master plan for the State may be years away. Use of one-fourth of the land in the State for wildlife areas, national forests, national parks, and scenic rivers may be well justified. However, the exact locations, sizes, and distribution of such areas should be compatible with and a part of the overall land use plan for Alaska.

We appreciate the opportunity to comment.

Sincerely,

Ralph M. Bell (acting)

Weymeth E. Long
State Conservationist

Attachments

cc:
Kenneth E. Grant, Administrator, SCS, Washington, D.C.
Council on Environmental Quality (5 copies)
USDA Coordinator of Environmental Activities

PROPOSED

ADDITIONS TO THE MOUNT MCKINLEY NATIONAL PARK OF THE ALASKA NATIVE CLAIMS SETTLEMENT ACT (ANCSA) OF 1971 (35 STAT. 688)

SPECIFIC COMMENTS

We have enclosed two maps. The first map shows areas which include those soils and climatic areas with potential for agriculture. This map also shows the approximate boundaries of the proposed Additions to the Mount McKinley National Park and information available from SCS concerning areas in Alaska with agricultural potential. The second map, prepared by the University of Alaska, displays potential grazing lands throughout the State. In regard to the first map, the proposal does not have a section on the soils concerned. This is needed. Also, consideration has not been given to the proposed alternatives. The proposal impinges on potentially suitable farm land in the north and west. Alternative B-14 would take in a potential farming area in the Susitna Valley.

Page 2 - Table 1 needs clarification. It is assumed the table refers to millions of acres rather than acres.

Page 5 - Paragraph 3 states: "Subsistence uses are not definitely known to occur within the proposed additions. Therefore, such uses will not be allowed within the enlarged park with the exception that, if any individual existing traditional subsistence uses are subsequently proven, continuation of such use will be recognized at that time. Sport hunting of all kinds will be prohibited." The attitudes toward hunting - subsistence versus sport - appears in conflict with section 4(B) of PL 92203 which states: "All aboriginal titles, if any, and claims of aboriginal title in Alaska based on use and occupancy, including submerged land underneath all water areas both inland and offshore, and including any aboriginal hunting or fishing rights that may exist, are hereby extinguished." The issue should be explained or clarified.

Page 6 - Item (5) states: "Encourage and participate in the creation of a stable, multifactored regional economic base." We suggest the need of an economic analysis of the probable futures showing the economic contribution of an enlarged park with the losses to accrue from benefits foregone (such as hunting, mining and agriculture) with the proposal.

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Page 6 - Item (6) states: "Encourage responsible use and development of valuable renewable resources, including mining." We suggest agriculture on suitable soils should be recognized here as a potential alternative use of the soil resource. Further, we call attention to the existence of Alaska legislation which enables and authorizes the Alaska Soil Conservation District. Subdistricts throughout Alaska have been created under the Alaska Soil Conservation District. Locally elected subdistrict directors manage subdistrict affairs, and monitor, guide and direct resource conservation and development efforts. We suggest that the Secretary of the Interior establish liaison and working relations with the District and Subdistrict directors to accomplish the quoted objective.

Page 38 - Item 2, and first line on Page 39 states: "Although land use patterns in much of the Mount McKinley region have yet to evolve, it is possible to predict some of the pending pressures on Mount McKinley National Park. Land withdrawals made under the terms of the Alaska Native Claims Settlement Act are beginning to indicate preliminary and very general potential land use patterns around the existing park. (Land Ownership Map) At present, there is no statewide land use plan.

State lands to the west, south, and east of the park have potential for a wide range of recreational activities, mineral extraction, harvesting of forest products, and settlement." The pressures to be recognized should include regional (Alaska), national, and international needs and demands for human (and pet) food energy (caloric) needs. The State lands to the west, south and east in the park may have potential for agriculture (grazing, as of reindeer in some areas; tillage to crop; and pasture in other areas).

Page 63 - Second paragraph - "Agriculture". The paragraph is an obsolete statement and should be revised to reflect the current situation. For consideration, we suggest "Alaska's Agricultural Potential", by the Alaska Rural Development Council. (Contact Cooperative Extension Service, Fairbanks, Alaska)

Page 137 - G "Impact on Transportation" - Although not noted as a preclusion on pages 137, 138, 190, and 199, resource data needs in the future must be considered in the setting of restrictions. For example, on the part of the Department of Agriculture and cooperating and participating state and federal agencies, it is proposed that the cooperative snow survey program in Alaska be expanded. The data obtained from snow surveys provides information for flood hazard and water supplies forecast. It is important that (1) landing access be permitted for the conduct of snow surveys, and (2) sensing devices and radio telemetry installation be permitted at certain mutually satisfactory locations.

Page 155 - Paragraph three states: "Additions to the park, that is, changes in the existing boundary, would preclude realization of some economic benefits from both renewable and nonrenewable resources, such as minerals and timber of these lands. Elimination of mining would affect a maximum of 15 mineral patents and 45 located claim groups totaling 7,878 acres. Economic value of lost mineral revenue is unknown. Hunting and trapping would be affected. Commercial, recreational, and residential developments would be precluded. . . ."

This paragraph illustrates the concern we expressed in our general statement regarding "Alternative Land Uses". We suggest decisions be based on full knowledge and full disclosure on the "trade-offs".

Page 158 - First paragraph, last sentence states: "The nature of the resources of this area are such that the continued application of multiple-use management could result in the economic environmental effects being inversely related to the natural environmental effects." This implies that multiple use is undesirable, and should be supported by factual data to support the claim.

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NOTE: The general comments are furnished with the cover letter, are applicable to this proposal, and should accompany these specific comments.

RESPONSE TO COMMENTS BY
DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

1. Soils information has been added in the section of Chapter II now titled "Soils, Permafrost and Related Frost Factors." In addition a soils map has been added to Chapter II, section 15. All available soils information would be utilized in further planning stages and future development of visitor use facilities.
2. Potential land uses now foreseeable are detailed in the "Probable Future" and "No Action" sections of this text. Trade-offs have been carefully considered in the development of this proposal, and revision has been made in this document to more accurately portray the benefits lost as well as gained by the implementation of it.

Analysis of specific land uses for development sites, as outlined in the Master Plan, will continue throughout the planning process. Limitations of climate, soils and topography for development sites will be analyzed more specifically in associated future environmental assessments and impact statements, as discussed in Chapter IV. Land uses under alternative management systems are discussed in Chapter VIII.

3. Long-term commitments included in this proposal are recognized and discussed in Chapter IV. It has not yet been determined that agriculture represents the highest and best use of these lands.
4. This responsibility is recognized. The proposals were prepared within a cooperative planning effort, and cooperative planning and management with Federal, State, and local agencies and individuals is indicated throughout the statement as one of the objectives of the NPS.
5. As noted in the response to comment 1, above, a soils map has been included. Also, agricultural potential has been recognized in Chapters II and III and in alternative B-14.
6. Correction has been made of this typographical error.
7. The continuation of subsistence uses of these lands is being extended as a privilege, not an aboriginal right, and will apply without regard to race.

Except as may be otherwise prohibited by Federal or State law, existing traditional subsistence uses of renewable resources will be permitted until it is determined by the Secretary that utilization

of these resources is neither economically or physically necessary to maintain human life nor necessary to provide opportunities for the survival of Alaskan culture centering on subsistence as a way of life.

If it is demonstrated that continued subsistence uses may result in a progressive reduction of animal or plant resources which could lead to long range alternations of ecosystems, the managing agency, following consultation with the Alaska Department of Fish and Game, communities, and affected individuals, shall have the authority to restrict subsistence activities in part of all of the park.

The discussion of subsistence has been revised in numerous places in the text, especially "Economic Activities and Resource Uses," Chapter II, and "Subsistence and Other Resource Harvest Activities," Chapter III.

8. Insofar as possible, this impact statement attempts to discuss the benefits foregone and/or gained by the enactment of this proposal. In many cases, however, the commodities gained or lost are not calculable. See response to Department of Commerce comment 2 for a more complete discussion of this question.
9. Agriculture as a potential use has been included. Relations, liaison, and cooperation with all interested parties, including the Alaska Soil Conservation District officers, will be sought.
10. These suggested agriculture uses have been added to this statement.
11. The statement made in the text is true for the present time. The authors of the study you cite address the future of Alaska's agricultural potential in this way:

Any discussion of export markets must, at this time, fall within a subjective conceptual perspective since information, data, and experience are almost nonexistent...

A very limited historical experience in the export of "agricultural" products, of particular types, does lend credibility to anticipations of future market development.

See also "Impact on Agriculture" section of Chapter III.

12. The use of Park Service areas for snow surveys where permanent structures or permanent damage to the landscape are involved would not be allowed. However, special use permits could be awarded within NPS special procedures, and all valid and existing rights

will be honored. Aircraft landings, presumably by ski-equipped aircraft or helicopter, could be allowed, and sensing devices and telemetering equipment could be permitted at mutually satisfactory locations.

13. This statement is not meant to imply that multiple use is undesirable, except in the narrow stated sense of natural environmental effects. Since the present predominant use of the area is mining, it is likely that this use would continue. The disruption of the landscape in mine and access corridor development, the presence of man, and the small, but not negligible amount of air and water pollution which would probably result, constitute adverse effects on the natural, unaltered environment. The converse, by implication, is also true -- that preservation of the natural environment could result in adverse economic environment effects. This "trade-off" was carefully considered in the formulation of this proposal.



UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Science and Technology
Washington, D.C. 20230

July 8, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

The draft environmental impact statement for "Proposed Mount McKinley National Park, Alaska," has been received by the Department of Commerce for review and comment.

The statement has been reviewed and the following comments are offered for your consideration.

Summary

1. An overall environmental impact statement is required covering the cumulative impact of all 28 proposed withdrawals. Section 1500.6(d)(1) of the Council on Environmental Quality Guidelines states: "Agencies should give careful attention to identifying and defining the purpose and scope of the action which would most appropriately serve as the subject of the statement. In many cases, broad program statements will be required in order to assess the environmental effects of a number of individual actions on a given geographical area." This is one Federal action - not 28 - and the impact is aggregate. Particular emphasis should be placed on the benefits of environmental protection versus the costs to other national goals such as "Project Independence" with its heavy reliance on Alaskan petroleum. Consideration should be given to the effect of reduced domestic minerals supply on the overall economy in light of Secretary Morton's Foreword to his 1973 report to the Congress under the Mining and Minerals Policy Act where he stated that ". . .energy and minerals are the lifeblood of our industrial economy. . ." and ". . .development of our domestic resources is not keeping pace with our needs. . ."

2. The 28 draft environmental impact statements do not fulfill the National Environmental Policy Act requirements as set out in the decision of the D.C. Circuit Court in the Calvert Cliffs case construing the requirements of Section 102(2)(C) to include an economic and environmental cost/benefit analysis.

Page 27 of the decision reads as follows: "In each individual case, the particular economic and technical benefits of planned action must be assessed and then weighed against the environmental costs. . . ." The decision clearly calls for cost/benefit analyses which are not contained in the draft environmental impact statement in even rudimentary form.

3. Section 1500.2(b)(3) of the CEQ Guidelines state that: "In particular, agencies should use the environmental impact statement process to explore alternative actions that will minimize adverse impacts and to evaluate both the long- and short-range implications of proposed actions to man, his physical and social surroundings, and to nature." Consideration of man's social (economic) surroundings are completely deficient in the 28 statements.

4. Section 1500.8(a)(1) of the CEQ Guidelines requires that: "The interrelationships and cumulative environmental impacts of the proposed action and other related Federal projects shall be presented in the statement." The 28 statements, on the contrary, completely disaggregate all impacts, social and environmental.

5. Section 1500.8(a)(2) of the CEQ Guidelines specifically requires impact statements to cover "the relationship of the proposed action to land use plans, policies and controls for the affected area. This requires a discussion of how the proposed action may conform or conflict with the objectives and specific terms of approved or proposed Federal, State, and local land use plans, policies and controls." The draft statements do not discuss the recommendations of the Federal-State Land Use Policy Commission, nor do they make any evaluation of the impact on the State of Alaska transportation plan. The responsibilities of the State and the Department of Commerce under the Coastal Zone Management Act of 1972 (P.L. 92-583) should also be considered in the statement.

6. Section 1500.8(c) of the CEQ Guidelines requires each statement "be prepared in accordance with Section 102(2)(A) of the Act that all agencies of the Federal government 'utilize a systematic interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental arts in planning and decision making which may have an impact on man's environment.'" Social science (economic) input, essential to balancing the needs of man's environment against the environmental needs of flora and fauna, is not apparent in the statements.

General Comments

The aggregate "Four Systems" acreage is included in 28 separate proposals as follows: 11 additions to National Park Service areas, 32.2 million acres; 9 additions to the National Wildlife Refuges, 31.5 million acres; 4 additions to National Forest areas, 18.8 million acres; and 4 Wild and Scenic Rivers areas proposals, totalling approximately 1 million acres.

If these proposals are realized, Alaska will contain nearly 85 percent of the National Wildlife Refuges, 61.5 percent of the National Park lands and 16 percent of the National Forests as its portion of the total U.S. areas for the reserves. The distribution of the proposal areas will, furthermore, become a serious obstacle to further resource and economic development in the State.

Taken independently, most of the proposals are excessively large for single use designation. When taken as a group, and in addition to other existing excessively large, single-use Federal land withdrawals in Alaska, the combined pattern interdicts a much greater area by restricting use and access. When the areas are also combined with another classification introduced in the proposals (areas of environmental concern, to be managed in a manner complementary to the initial proposal area), the total exceeds twice the stated withdrawal area. The restrictive areas include resource-rich but undeveloped areas which could be supporting prosperous regional economies as well as contributing essential raw materials to the gross national product.

Alaska's contribution to the national prosperity is currently limited by surface transportation and land classification problems. The proposals will compound these problems. Meanwhile, a recent set of figures states that for every Federal dollar collected in Alaska, 23 are spent in the State. This is far from a contributory position and raises questions of how withdrawals can be justified which perpetuate this economic dependency.

At the time of enactment of the Alaska Native Claims Settlement Act, less than 0.5 percent of Alaska was in private ownership. With full selection by the Native corporations and individual Natives, 10.7 percent of Alaskan land will be in corporate or private Native ownerships. State selections entitled under the Alaska Statehood Act should eventually reach 27.4 percent of the land area. This land currently stands at 9.7 million acres patented and 4.3 million acres tentatively approved. Patenting of Native lands has just begun.

The approach taken in preparation of the individual statements ignores the cumulative effect of its impact in addition to each of the other proposals and existing withdrawals. Each discussion, furthermore, approaches its area with single or limited resource purpose as its objective, and with a purely agency oriented interest. Assumptions far outnumber facts in discussions of alternatives, and these assumptions commonly apply only if the subject area were the single representative of its category.

The cumulative result will be more serious, as noted. The effect would not only cripple Alaskan economic development, but would also restrict the growth of the national economy by withholding sorely needed mineral raw materials from development. Present estimates are that Alaska can provide a continuing supply of mineral products on an orderly basis using only 0.3 percent of the surface area provided most of the required 0.3 percent is not locked up in single purpose withdrawals.

Some long-term environmental interests are ignored. These vast areas of scenery and wildlife habitat are restricted to the use and enjoyment of a handful of those physically or

financially able to enter the undeveloped wilderness. The great majority of people can only receive their impressions from the records and writings of the privileged few.

The 28 draft environmental statements are completely descriptive with little or no analysis. In all but the four National Forest additions, they use the argument that preservation is necessary for preservation's sake. Neither alternative uses nor the multiple use concept are weighed. Cost/benefit relationships are not attempted.

Specific Objections

Section 17(d)(2) of the Alaska Native Claims Settlement Act directs the Secretary of the Interior to withdraw "up to, but not to exceed, eighty million acres." The "Four Systems" proposals total 83.5 million acres. In addition, most of the impact statements define "areas of ecological concern" surrounding the proposed withdrawals. These areas appear to have no legislative authorization, are given no convincing rationale and further confuse an already complex land use policy issue.

The Joint Federal-State Land Use Planning Commission, established by Section 17 of the Alaska Native Claims Settlement Act, made recommendations to the Secretary of the Interior in July 1973, regarding areas to be withdrawn and under what conditions. These recommendations have been substantially ignored; particularly the multiple use management concept and the recommendations that specific language providing for continuation of subsistence hunting and fishing be included in all withdrawal actions. Many of the withdrawals are far too excessive for the stated purpose. Mineral and petroleum evaluations on the withdrawals are minimal and go largely on the basis that if it has not been mined or drilled, it probably is not there. Even on this basis, significant resources are shown for many of the withdrawals. More information on which to base a legitimate cost/benefit relationship exists in:

- a. U.S.G.S. Bulletins Number 1246, 1374, 1242-B
- b. Reports soon to be printed by the Federal-State Land Use Planning Commission
- c. Extant information from the Division of Geological and Geophysical Surveys, Department of Natural

Resources, State of Alaska. Open File Report Number 44 is particularly applicable to petroleum resources

- d. Senate Interior and Insular Affairs Committee Report, Mineral and Water Resources of Alaska, 1964

While hard information on mineral and petroleum deposits is generally scanty, indicators are not and our information is that the Department of the Interior (Park Service and Bureau of Land Management) may be inhibiting State, Native and even Federal (U.S.G.S.) attempts to further quantify deposits in the withdrawal areas.

The proposed withdrawals would seriously restrict proposed transportation corridors to the detriment of a viable transportation infrastructure of the State. In June 1973, the Alaskan Highway Department prepared a map showing proposed transportation system extensions plotted against extant and "Four Systems" Federal withdrawals. While the proposed corridors have been modified somewhat in the interim and the proposed withdrawals plotted at the same time have been significantly expanded, the map graphically illustrates the problem. While the Secretary of the Interior makes mention of this problem in his letter of December 17, 1973, transmitting the "Four Systems" Bill to the Senate, it is not provided for in the legislation itself. Without specific provision, any attempt by the Secretary to allow a transportation corridor through withdrawal areas would come under the National Environmental Policy Act with ensuing "quality of life review" and possible court actions such as was faced by the Trans-Alaska Pipelines.

With the exception of the cities of Anchorage and Juneau, Alaska as a whole is classified by the Economic Development Administration as a depressed area. No indications of aggregated economic impact are supplied. Local economic impacts are mentioned only in passing and then frequently play up visionary benefits from tourist dollars and employment by the Department of the Interior.

Economic Potential

The EIS should consider the economic potential of the area. This would consist principally of resource development, the

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qualitative importance of which is recognized but the quantitative significance of which is inadequately assessed. The EIS should address the question: How essential are the available resources for national economic needs and well-being? Thus, the EIS should go beyond citing the existence of potential mineral resources. It should report on the potential contribution of mineral resources to national needs in terms of volume, volume relative to total national production and imports, and value. It is essential to know whether there is an actual or anticipated need for these minerals and whether these resources can be tapped readily. These considerations need also to be addressed with respect to timber and other resources within the area.

The potential development of mineral or other resources will set in motion forces that will alter the income and employment prospects of the area. Therefore, the potential gains in income and employment need to be assessed, quantitatively to the extent possible. In the event that potential mineral development is precluded by the use of the land for other purposes, the income and employment foregone should be included as a cost.

The process of resource development and income generation requires both capital and manpower resources. Capital may be obtained from within the State by being diverted from other uses (opportunities foregone should be noted) or capital may be obtained from outside the State. With respect to manpower, a full discussion is necessary of the area's (and the State's) manpower resources to meet the growth potential. This necessitates an examination of prospective population growth, both natural and through migration.

Potential development of the area's resources will mean community development in the form of transportation facilities, structures (schools, etc.) and other infrastructure. Since these entail both benefits and costs, the net benefits or costs should be ascertained.

Costs Associated with the Development of Economic Potential

Set against the benefits to be derived from development of the area's resources are the costs of doing so.

The EIS should discuss in concrete terms how much environmental protection would be lost by resource development -- in terms, for example, of land area displaced, wildlife killed or displaced, and vegetation destroyed. Whenever possible, quantitative estimates of the costs should be included.

The EIS should also evaluate how much control over environmental preservation would be lost if resource development should take place in the area.

Environmental Protection

The EIS should document how essential environmental preservation of the area is and will be to the Nation's needs and well-being in terms, for example, of the preservation of wildlife, preservation of vegetation, and preservation of the culture of the area's inhabitants. This part is emphasized in the EIS, but it is not balanced against considerations relating to economic potential.

The EIS should then consider, if the environment is preserved, what derivative benefits accrue, for example, through tourism and recreation. To say that tourism will be fostered is not enough. The gains from tourism need to be measured against the losses from other economic activities that are foregone.

Costs Associated with Environmental Protection

The question must be asked: How much economic potential would be lost by environmental preservation? The answer would be derived from the estimates of development potential that is available and would not be exploited because of the setting aside of lands.

The EIS should also present an evaluation of how much control over potential economic development would be lost as a result of environmental preservation measures. One aspect of this question that must be addressed is the interrelationship between preserved areas. The EIS cannot be considered in isolation; it must take account of the economic effects that may arise from environmental preservation covering a broader land area. The EIS should address the question: How much of the State's economic potential will be shut off from use if this and other protected areas are established?

The framework suggested above would not militate against economic development or environmental protection. It would place each of these objectives in a more balanced perspective.

Fisheries Impact

With regard to meeting the provisions of Section 102(2)(C) of the National Environmental Policy Act of 1969, Public Law 91-190, we do not anticipate that the proposed action will have a significant adverse environmental impact upon the marine, estuarine, inland commercial, or certain anadromous fishery resources and their particular environments for which we have responsibility.

The Toklat River is incorrectly spelled on the transportation map (p. 31).

] 15

The generic name of the threespine stickleback, Gasterosteus, is misspelled in Appendix C (p. 238).

] 16

Thank you for giving us an opportunity to provide these comments which we hope will be of assistance to you. We would appreciate receiving a copy of the final statement.

Sincerely,

Sidney R. Galler
Sidney R. Galler
Deputy Assistant Secretary
for Environmental Affairs

RESPONSE TO COMMENTS BY
DEPARTMENT OF COMMERCE

1. Please see response to USFS comment 1 for a complete discussion of this point.
2. By directing the Secretary of the Interior to withdraw up to 80 million acres of land as units of the Four National Systems, Congress recognized the desirability of providing environmental protection and management for some of the natural resources in Alaska under recognized and existing national management systems; systems with a spectrum of differing objectives and emphasis in their management, not all economically oriented or subject to the quantification of cost-benefit analyses techniques.

This doesn't mean that Congress failed to consider environmental costs and environmental benefits or even economic costs and economic gains, for they clearly did recognize and consider them in the review and planning procedures established in the Act, and in the differing objectives set to be met by the Act's implementation. Nor does it mean that the Department of the Interior failed to consider economic or environmental benefits and costs in the planning process of developing these proposals in response to Congress' mandate. It is true the environmental statement itself does not contain a quantitative and traditional benefit/cost ratio of the type referred to in the above comment, for very good reasons; but it is not correct, as implied, that the planning process did not consider economic as well as environmental implications in advancing the proposals.

Thus the Department's planning and decisionmaking process is consistent with the Calvert Cliffs decision which indicated that NEPA requires that "...the particular economic and technical benefits of planned action must be assessed and then weighed against environmental cost..." Calvert Cliff's Coordinative Comm'n, Inc., V. United States Atomic Energy Comm'n, 449 F. 2d 1109, 1123 (D.C. Cir. 1971).

Moreover the Department has complied with that Section of the CEQ Guidelines which state "in each case the analysis should be sufficiently detailed to reveal the agency's comparative evaluation of the environmental (emphasis supplied) benefits, costs and risks of the proposed action and each reasonable alternative." CEQ

Guidelines, August 1973 FTS Vol. 38 No. 147. This portrayal of the environmental benefits, risks, and costs is undertaken in these statements, even if not in quantified form.

Each proposal and alternative attempts to identify as completely as possible with the available information, the identity and scope, trend or tendency, and size or relative significance of any significant environmental costs or environmental benefits inherent in the particular action or alternative. Where risks and uncertainties are involved, they too are noted. The nature of the actions themselves and the frequent lack of data involved in the different subject areas does not always lend this treatment to quantitative presentation, but it is undertaken qualitatively, so that objective description is provided the reader, and comparison by him is made possible.

It should be noted that the Department of the Interior does not habitually prepare economic cost-benefit analyses of land and recreation resource actions, lands transfers, and land classification actions. This is the case for the economic and technical reason that many aspects of such actions deal with the economic concept of "public goods." Public goods not being traded in the marketplace frequently deal with aesthetic and other intangible values of the environment not subject to readily agreed upon or rigorously disciplined systems of marketplace evaluation and quantification. Further, the incomplete evaluative nature of the economic benefit cost ratio as a decision tool has been widely recognized even where it is used.

3. Revised consideration of the economic aspects of the area is now included in Chapter II with additional information as to tourism and services industries, subsistence take figures, mineral potentials, and the market economy. It is hoped that these factors plus several others adequately address the economic situation of the area.
4. See response to comment 1 above.
5. Recommendations of the JFSIJPC were carefully considered in the development of this proposal. The commission recently accepted a coordinating role in the development of the cooperative planning and management zone. Reference to this agency is now included in Chapter I, "Interrelationships with other Projects and Agencies." Impacts on transportation are included in the section of Chapter III of that title. No change in jurisdictional authority under existing laws is proposed in this action. Consultation with the Matanuska-Susitna Borough in regard to coordinating planning in the CPMZ with the land plan of the Borough has been made and will continue.

6. See response to comment 3, above.
7. Revision has been made in many places in the alternative section in order to present a more objective discussion of the pros and cons of including these areas. Effort has been made to remove assumptions in favor of fact. See response to USFS comment 1 for a discussion of intent in regard to the aggregate impact of these proposals.
8. Chapters III-VII present analyses of the impacts of the management proposal. This study recommends lands and resources for preservation management as a unit of the National Park System under mandate from Congress in Section 17(d)(2) of ANCSA, for the Four System studies. Management for multiple use is discussed in Chapter VIII. See response to comment 2, above, concerning the cost/benefit issue.
9. It is the interpretation of ANCSA, 1971, by the Department of the Interior that the Secretary is not limited in the amount of land he may withdraw for possible inclusion in the four systems.

"Areas of Ecological Concern" are just that--areas of interdependent relationships to the proposal area in terms of wildlife habitat maintenance, maintenance of visual and scenic integrity, protective buffers around key waters and wildlife populations, interrelated vegetative and wildlife use patterns where degradation of one element could seriously alter the other and significant areas of cultural (archeological, historical, and sociological) relationship to the proposal or an adjacent native culture or population. It is hoped that specific cooperative agreements can be negotiated with any adjacent land managers and owners within the Areas of Ecological Concern to insure complementary protection of the values and resources of the proposal, with control and management of such lands retained by the owners and managers.

Management of the proposals as well as the Areas of Ecological Concern should include a mutual working dialogue between Federal landowners and surrounding land managers. It is reasonable that if landowners in Areas of Ecological Concern are to consider managing their lands in a "manner compatible with proposed values," then in return their views should be considered within the limits of applicable laws and regulations, in the management of Federal lands.

It should be noted that agreements regarding Areas of Ecological Concern represent only one approach to protection of Federal lands, and that the broad authority given the Secretary under 43 U.S.C; 1363 remains unaffected by the legislative proposal.

10. Reference to JFSLUPC input is made in response to comment 5, above. Department of the Interior policy on the compilation of cost/benefit analyses is discussed in the response to comment 2, above.
11. Due to the speculative nature of the information available on the mineral potential of this area, such an assessment of it in regard to the Nation's needs would be very hypothetical. Evaluation of timber resources has been revised on the basis of information from the USFS, this chapter.

The purpose of the environmental statement is to analyze the impact of the proposal on the human environment of the area. It is not the intent of the statement to evaluate the economic potential of the area. The supply and demand of resources by the national economy is a function of the economic system. Evaluation of the national economic system is not a responsibility of this environmental statement. Alteration of economic forces in the area with resource development activities is recognized and discussed under the multiple use management alternative in Chapter VIII.C.1. See response 2 concerning cost-benefit analysis.

12. See response to comment 2 above.
13. This document is intended to address the impacts--beneficial or adverse-- of this proposal. It cannot address the amount of environmental control which may occur under another management system. Activities which might occur, however, are discussed in the "No Action" alternative of Chapter VIII, and can be useful in outlining possible environmental effects.
14. The issues raised in this section have been previously addressed in responses to this letter. See responses to comments 2, this letter, and 1, to USFS letter.
15. The maps have been revised to correct this error.
16. Revision has been made in the appendix, reflecting this comment.

HEADQUARTERS, ALASKAN COMMAND
APO SEATTLE 98742



Mr. Theodor M. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, DC 20240

10 JUL 1974

Dear Mr. Swem,

Reference Department of the Interior letter, serial 2650(911), dated 16 January 1974, and subsequent press releases extending the deadline for comment to 22 July 1974.

Comments pertaining to 21 of the Draft Environmental Impact Statements are presented below. Our comments for the remaining seven areas were furnished to your office by our letter of 19 February 1974. It is assumed the maps shown in the published proposals accurately depict the areas under consideration. Copies of these maps are attached in Attachments 1 and 2. Changes in the area boundaries will require review to update our comments.

The following comments pertain to all 28 of the areas. The enacting legislation should:

a. Allow the yearly resupply of Air Force installations by Cool Barge (sealift barge) and commercial barges by coastal and inland waterways as scheduled without change of route or docking area unless agreed to otherwise by both government agencies.

b. Provide authorization to operate military controlled aircraft below 1,000 feet altitude when required for emergency/rescue operations, and for FAA agreed low-level training routes.

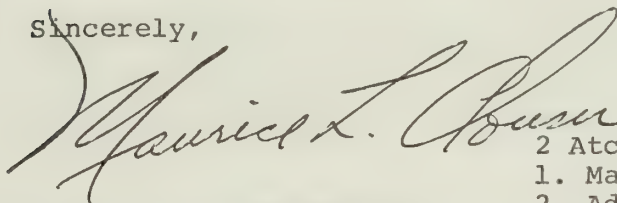
c. Provide for the removal of all land use restrictions during a national emergency.

More detailed comments are presented for Draft Environmental Impact Statements 73-84, Katmai National Park; 73-101, Yukon Delta National Wildlife Refuge; 73-100,

1

Togiak National Wildlife Refuge; 73-96, Iliamna National Resource Range; 73-103, Porcupine National Forest; and 73-105, Yukon-Kuskokwim National Forest in Attachment 2.

Sincerely,

A handwritten signature in cursive script, reading "Maurice L. Clouser". The signature is written in dark ink and is positioned above the typed name.

MAURICE L. CLOUSER
Colonel, USA
Secretary

2 Atch

1. Maps of Areas (14)
2. Additional Comments on
6 Specific Areas

RESPONSE TO COMMENTS BY
HEADQUARTERS, ALASKAN COMMAND

1. We see no conflict with the requirements of the Alaskan Command for resupply activities, flight altitudes as stipulated in the comments, and land use restrictions in time of true national emergency; therefore, there appears to be no need for additional legislative stipulations.

This proposal does not include areas served by barge supply. The NPS recognizes and cooperates with the Department of Transportation and the Federal Aviation Administration authorities over flight path regulation. As in the past, the Department of the Interior will continue to cooperate fully with the Department of Defense and respond to true national emergencies.



DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314

REPLY TO
ATTENTION OF:

DAEN-CWP-W

30 July 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

This is in further response to your letter of 28 December 1973 to the Executive Director of Civil Works, Chief of Engineers, concerning the Draft Environmental Statements in regard to the Alaska Native Claims Settlement Act of 1971. In my letter of 15 February 1974 to you, I indicated that: (1) the proposals contained in the seven Draft Environmental Statements for which the review period ended 20 February 1974 did not adversely affect the water resources development program of the Corps of Engineers; and (2) that comments of a substantive nature would be furnished you on one or more of the remaining proposals.

The State of Alaska is dependent upon its many waterways for transportation and communication. These waterways not only form a vital part of the existing socio-economic welfare of the people but also are necessary to future development of the State's resources. The Corps of Engineers has not made a detailed study of the Alaska waterways for navigability classification. Thus, we cannot specifically comment on each proposal as to its exact effect on navigable waterways. While many of the land withdrawals will curtail natural resource development within the proposal area, the potential will still exist for resource development to take place upriver of the protected area. This resource development, in most cases, will be contingent upon an efficient means of import and export transportation; i.e., river traffic. Thus, future development may require river traffic through the proposal areas. Most of the proposals indicate that regulations may be imposed for commercial and recreational use of waterways affected. Thus, it appears that these proposals will have a future impact on river navigation development and use when resource development occurs.

1

The 1969 Federal Power Survey assessed the potential of hydropower in the State of Alaska. It is quite apparent that the proposed land withdrawals will have a significant adverse impact upon further hydropower development in Alaska. Inclosure 1 is a listing of proposals and hydro projects affected. Inclosure 2 is an analysis of the effect on hydropower. The first category tabulation shows 11 sites would be completely eliminated from further hydropower consideration due to complete overlap of withdrawal areas on potential dam and reservoir locations. These 11 potential projects total approximately 39 percent of the listed hydropower potential as appraised by FPC. It should be noted that over half of this 39 percent is attributed to one project, Rampart Canyon. An additional eight sites, Category 2, or 36 percent of FPC total hydropower potential would be affected to the extent that the projects would possibly need to be rescoped in size or location. It should be recognized that future detailed studies may find a large number of these projects not compatible with the proposed land use. Category 3 lists two sites as being above withdrawal proposals and hence would have downstream effects on proposed withdrawals and would involve about 1.2 percent of the listed hydropower potential. In summary, a total of about 76 percent of the potential hydropower projects in Alaska will be directly or indirectly affected by the Department of the Interior's proposals. Impacts on existing and potential transmission line routes were not evaluated.

2

Of primary concern to us is the major adverse impact proposed land withdrawals will have on the State of Alaska's future potential energy resources. Outright elimination of 39 percent of the State's hydro potential, coupled with an unknown impact on an additional 36 percent of this resource could greatly constrain available options, and result in consumption of large amounts of rapidly diminishing non-renewable energy resources, and could adversely affect the social, economic, and environmental welfare of the State of Alaska. We believe that further studies should be made to properly evaluate the magnitude of the trade-offs and losses in preserving one resource for another. Therefore, on this basis, we recommend that the 21 proposed land withdrawals not be made at this time.

Sincerely,

J. W. Morris BG USA
J. W. MORRIS

Major General, USA

Acting Director of Civil Works

2 Incl
As stated

POTENTIAL HYDROPOWER AFFECTED IN DES's
 SHOWING
 FPC HYDROELECTRIC POTENTIALS
 DATED
 1969

DES 73-87	CAPE KRUSENSTERN NATIONAL MONUMENT (1) Agashashok
DES 73-83	MOUNT MCKINLEY NATIONAL PARK No listed sites affected by main proposal
DES 73-86	HARDING ICEFIELD-KENAI FJORDS NATIONAL MONUMENT No listed sites affected by main proposal
DES 73-84	KATMAI NATIONAL PARK (30) Naknek
DES 73-91	GATES OF THE ARCTIC NATIONAL PARK No effect on viable sites.
DES 73-93	CHUKCHI-IMURUK NATIONAL RESERVE (5) Tuksuk
DES 73-92	YUKON-CHARLEY NATIONAL RIVERS (22) Wood Chopper (20) Rampart
DES 73-89	LAKE CLARK NATIONAL PARK (27) Tazimina (28) Ingersol (31) Crescent Lake (32) Chakachemana
DES 73-90	WRANGELL-ST ELIAS NATIONAL PARK (53) Wood Canyon
DES 73-101	YUKON DELTA NATIONAL WILDLIFE REFUGE No listed sites affected by main proposal
DES 73-99	SELAWIK NATIONAL WILDLIFE REFUGE No listed sites affected by main proposal
DES 73-95	ARCTIC NATIONAL WILDLIFE REFUGE No listed sites affected by main proposal
DES 73-97	KOYUKUK NATIONAL WILDLIFE REFUGE (6) Holy Cross (7) Dulbi
DES 73-100	TOGIAK NATIONAL WILDLIFE REFUGE No listed sites affected by main proposal

- DES 73-102 YUKON FLATS NATIONAL WILDLIFE REFUGE
 (21) Porcupine
 (22) Woodchopper
 (76) Yukon-Taiya
 (20) Rampart
- DES 73-96 ILIAMNA NATIONAL RESOURCES RANGE
 (26) Lake Iliamna
 (27) Tazimina
 (28) Ingersoll (Lackbuna Lake)
 (29) Kukaklek
- DES 73-98 NOATAK NATIONAL ARCTIC RANGE (NOATAK NATIONAL ECOLOGICAL RANGE)
 Three potential hydro-electric sites--one name given
 (1) Agashashok
- DES 73-109 FORTY MILE NATIONAL WILD RIVER
 (23) Fortymile
- DES 73-110 UNALAKLEET NATIONAL WILD RIVER
 No listed sites affected by main proposal
- DES 73-103 PORCUPINE NATIONAL FOREST
 (20) Rampart
 (21) Porcupine
 (22) Woodchopper
 (76) Yukon-Taiya
- DES 73-105 YUKON KUSKOKWIM NATIONAL FOREST
 (6) Holy Cross
 (11) Ruby
 (24) Crooked Creek
 11

SUMMARY Twenty-one (21) listed FPC sites affected of listed 76 total for state of Alaska. Affects--Yukon River, Kuskokwim River, Naknek River, Noatak River, Porcupine River, and others.

LEGEND () Denotes FPC site number

CATEGORY-1

IF PROPOSAL GOES THROUGH THE FOLLOWING PROJECTS WOULD BE COMPLETELY
ELIMINATED.

Data compiled from 1969 Federal Power Commission study & DES's

	<u>SITE</u>	<u>KWH x 10⁶</u>
23	Forty Mile	723
6	Holy Cross	12,300
11	Ruby	6,400
24	Crooked Creek	9,400
30	Naknek	473
7	Dubli	1,070
28	Ingersol	630
31	Crescent Lake	179
29	Kukaklek	232
26	Lake Iliamna	1,370
20	Rampart	<u>34,200</u>
	TOTAL 11 Sites for	66,977

% of FPC listed Firm Energy

$$\frac{66,977}{171,840} = 39.0\%$$

CATEGORY-2

IF PROPOSAL GOES THROUGH THE FOLLOWING PROJECTS WOULD HAVE TO BE RE-SCOPED

NOTE: As limited study has been accomplished on below list projects, future detailed study may find some incompatible with land withdrawals and eliminated as hydropower potential.

	<u>SITE</u>	<u>KWH x 10⁶</u>
1	Agashashok	820
5	Tuksuk	289
27	Tazimina	224
53	Wood Canyon	21,900
76	Yukon Taiya	21,000
22	Wood Chopper	14,200
21	Porcupine	2,320
32	Chakachamna	<u>1,600</u>
	TOTAL 8 Sites	62,353

% of FPC listed Firm Energy

$$\frac{62,353}{171,840} = 36.3\%$$

CATEGORY-3

IF PROPOSAL GOES THROUGH, FOLLOWING PROJECTS WOULD HAVE DOWNSTREAM EFFECTS

	<u>SITE</u>	<u>KWH x 10⁶</u>
8	Hughes	482
9	Kanuti	<u>1,612</u>
	TOTAL 2 Sites	2,094

% of FPC Listed Firm Energy

$$\frac{2,094}{171,840} = 1.2\%$$

RESPONSE TO COMMENTS BY
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

1. None of the rivers in the Mount McKinley region are thought to now support commercial navigational use or to have the potential for such use. This proposal does not change jurisdictional authority over navigable waterways, which is held by the State of Alaska.
2. The text of this statement is in agreement with your assessment of the lack of effect this proposal will have on proposed hydropower projects.



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

REGION X

ARCADE PLAZA BUILDING

1321 SECOND AVENUE

SEATTLE, WASHINGTON 98101

July 15, 1974

OFFICE OF THE REGIONAL DIRECTOR

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

This letter is in response to the 28 draft Environmental Impact Statements prepared by the Department of the Interior for the disposition of some 83.5 million acres of public land in Alaska. This land became available to the Federal government under terms of the Alaska Native Claims Settlement Act of 1971, Public Law 92-203.

Several persons within the Regional Office have reviewed various statements. Because the actions are fairly similar, involving the placement of land under the protection of the National Park Service, I find it most appropriate for DHEW to make general comments applicable to the actions in total.

In this vein, I must confess that I found the magnitude of the material submitted almost overwhelming. I am sure that the DoI must have had some master plan guiding the proposed disposition (or designation) for each of the 28 areas. I believe DoI should have provided an overall summary of the total effects of all these actions upon Alaska, especially upon the social, economic, and cultural framework of Alaskan Native life. In this regard, I refer you to Section 1500.6(d) of the Council on Environmental Quality's "Guidelines for the Preparation of Environmental Impact Statements" (Federal Register, Wednesday, August 1, 1973, pp. 20550-20562).

DHEW Region X finds the intention of these actions laudable, recognizing in them the desire to protect and maintain both the wildlife and topography in a natural state. In this respect, the proposals are well conceived.

As mentioned previously, DHEW's concerns center around the impact of these actions upon the Native population. I did not always find it clear what restrictions the various land designations would place upon the Native's subsistence or cultural activities.

I would like to quote comments made by Region X's Indian Health Services liaison person:

"Review indicates that the subjects of 'subsistence' and 'Native culture' are dealt with in varying degrees, both in the general

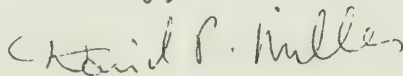
text and alternatives of the proposals. While the purpose of the proposals are laudable relative to enhancing the environment of the areas discussed, it must be remembered that the Alaska Native and his culture are important components of the total scene and must be dealt with accordingly. It is my fondest hope that the proposers do not assume that the ANCSA lands distribution will solve all problems of Native cultural retention and subsistence.

"To assure and insure that cultural retention and subsistence activities are guaranteed, this should be spelled out and factored into each alternative so that acceptance of any one alternative will not destroy the Native features of the environment."

Another reviewer is concerned that consideration be given to the concept of training and utilizing Alaskan Natives as professional staff for the various new positions created to manage these lands on a protective basis. Page 20 of the EIS for the proposed Arctic National Wildlife Refuge indicates that Native employment will only be in non-professional capacities.

Region X DHEW appreciates the opportunity to comment upon these proposals.

Sincerely,



David P. Miller
Acting Regional Environmental Officer

3

RESPONSE TO COMMENTS BY
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

1. Please see response to comment 1 of the USFS letter for a more complete discussion of this point.
2. Alternatives to the proposed action dealing with boundary relocations affect only the size and shape of the proposal, and not the legislative or administrative aspects of it. Thus, regardless of which boundary alternative(s) might be enacted, the policy of the NPS regarding subsistence uses (in Chapter I) will be unchanged.
3. The National Park Service intends to train and utilize qualified Natives in positions at all levels. See Chapter I, section B, for a discussion of this intent.



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
ARCADE PLAZA BUILDING, 1321 SECOND AVENUE
SEATTLE, WASHINGTON 98101

February 12, 1974

REGION X

Office of Community Planning
and Management

IN REPLY REFER TO:

MS 307

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

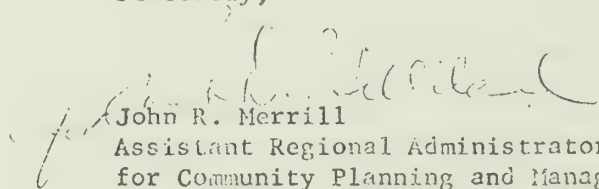
Subject: Draft Environmental Impact Statement, Number 73-83 thru 73-110

We have reviewed the appropriate portions of your draft statements submitted with your December 28, 1973 letter.

The statements include proposals covering 28 different sites in Alaska. Your proposals are to preserve significant archeological sites, preserve and investigate geological and biological features, encourage the preservation of native cultures and in general to develop an administrative and management plan for each site. You also indicate the planning process to include state, local and citizen input. We find nothing in your proposals that would have a significant adverse impact in our areas of concern. Thus, we have no objection to your proposals.

Thanks for letting us comment.

Sincerely,


John R. Merrill

Assistant Regional Administrator
for Community Planning and Management

cc: CEQ (10)
Miller
Moore
Peyton
Riddell



United States Department of the Interior

ALASKA POWER ADMINISTRATION

P O BOX 50
JUNEAU, ALASKA 99801

IN REPLY REFER TO

July 16, 1974

700

AIRMAIL

To: Chairman, Alaska Planning Group
Department of the Interior

From: Administrator

Subject: Review of Draft Environmental Impact Statement for the
Proposed "Mount McKinley National Park," DES 73-83

The subject statement covers one of the Department's proposals under
Section 17(d)(2) of the Alaska Native Claims Settlement Act.

We have reviewed the statement from the viewpoint of the Alaska Power
Administration program areas of water, power, and related resources
planning.

We believe the draft is generally well written and adequate in its descrip-
tion of the existing environment and resources of the area, and impacts
of the proposal. Our other comments are as follows:

1. There have been a number of recent actions concerning the
Upper Susitna hydroelectric potentials. We suggest an addi-
tion under the section on "Power Resources" (pp. 112 to 116)
to indicate there are active studies and proposals, both Federal
and State, for early development of the Upper Susitna hydro
resources and a major electric intertie between Anchorage and
Fairbanks. A copy of our May 1974 Status Report on the Devil
Canyon Project is enclosed for reference.
2. The symbols on the powersite map, Page 113, are reversed.
3. The draft discusses impact on hydroelectric resources as a
subsection under "Impact on the Local Economy," Part III-F.
This section is generally restricted to considerations involving
the several small communities in the vicinity of the park proposal.

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Relationships between the park proposal and the regional power resources are very important in context of the economy of the entire Railbelt area; thus, it is significant that the draft indicates at Page 135 that the Upper Susitna hydro development would not conflict with the park proposal.

We suggest that Part III of the final statement include a separate section discussing impact on power resources, including the materials at Pages 134 and 135, and a discussion of impacts of the proposal on potential route selection and design for the Anchorage-Fairbanks intertie.

4. At Page 192, we suggest an addition to indicate that Alternative B-11 would place access and transmission routes near Devil Canyon damsite within the park and may have significant impact on consideration of that project.
5. At Page 202, we suggest an addition to indicate that Alternative B-14 would place the Denali Dam and Reservoir, access areas for Denali and Devil Canyon dams, and very important portions of the potential intertie routes within the park. This alternative would significantly restrict future consideration of the Upper Susitna hydroelectric resources.

J. V. House

Enclosure

cc: Assistant Secretary -- Energy and Minerals
Attention: Mr. J. Emerson Harper

RESPONSE TO COMMENTS BY
DEPARTMENT OF THE INTERIOR
ALASKA POWER ADMINISTRATION

1. This information has been included in the appropriate section of Chapter I as suggested. We appreciate receipt of the Status Report and intend to utilize it and other relevant information as to the Devil Canyon project in future park planning and management stages.
2. Correction of the map legend has been made.
3. For simplicity in the organization of this document, and because the impact of this proposal on the Upper Susitna hydroelectric development is not considered to be significant, we have not included a separate section for this discussion but have left it under the section of "Impact on Local Social and Economic Conditions" in the subsection titled "Hydroelectric Potential." It is recognized that the development of this project and subsequent power production will have more than local significance, if and when it occurs. Additional information has been included in Chapters II and III in regard to this project, with reference to the fact that route selection might be influenced by the enactment of this present park proposal.
- 4,5. This information has been added to each of the alternatives involved.



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
WASHINGTON, D.C. 20242

IN REPLY REFER TO:

Environmental Quality

Memorandum

To: Theodor R. Swem
Chairman, Alaska Planning Group
Acting *[Signature]*
From: Deputy Director, Office of Trust Responsibilities
Subject: Review of Draft Environmental Statement for Proposed
Mount McKinley National Park, Alaska (DES 73/83)

In response to memorandum dated December 28, 1973, this Bureau has reviewed the proposed ANCSA D-2 withdrawal environmental statement identified above with respect to its effects upon the Native Alaskans and the trust responsibilities of the Department. The following comments are provided for your consideration:

General Comments:

The Native Alaskan, by necessity, survives in a subsistence economy provided by the renewable resources available to him from the land on which he lives. Restricting the land base available to him can adversely affect not only his survival but the future of his community. Loss of land base can also prevent the Native Alaskan from progressing beyond today's survival economy. These social and economic impacts should be comprehensively discussed as they relate to the management or restrictions placed on the land which will be lost to the Alaskan Native by the proposed withdrawal.]

Specific Comments:

The area proposed as an addition to the park has many existing mining claims and producing mines which would be affected by the proposal. The related impacts on the subsistence economy of Alaskan Natives should be discussed.]

RESPONSE TO COMMENTS BY
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

1. The section of impacts on the subsistence lifestyle has been extensively revised, as has the description of ongoing subsistence activities. Data on subsistence levels are included in appendix G. The importance of this resource use, both economically and culturally, is recognized. Chapter III now includes a reference to and discussion of NPS intent to conduct a study of subsistence activities, including input from present users, before acting to define subsistence as opposed to sport hunting.
2. Valid existing rights will be recognized in the lands included into the park, therefore present mining activities will continue. Preclusion of further mineral entry will probably be beneficial to wildlife populations of the area (as stated in the impact on wildlife section) and this result should prove to be a benefit for subsistence animal resource harvesters.



United States Department of the Interior

1792(220)

BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

DES-73/83

JUL 22 1974

Memorandum

To: Chairman, Alaska Planning Group

From: Director, Bureau of Land Management

Subject: Mt. McKinley National Park

We have reviewed the draft environmental statement and offer the following comments:

The proposal puts major emphasis on preservation and seems to continually play down and underestimate (p. 134) the values of hunting. Hunting is referred to as a "destructive" use (p. 206) and leaves the impression that if hunting is allowed the last remaining animal will be chased down and killed. Perpetuation (p. 125) of populations is stressed without consideration given to regulatory methods when natural regulation does not do the job.

A cooperative planning and management zone is proposed involving several Federal agencies, the state, and private organizations. The effectiveness of this type of organization is highly questionable. Assuming that it would work, the justification (p. 6) is very weak.

It is desirable that the present park boundaries be adjusted since at present they are arbitrary straight lines. A more natural boundary would include whole drainages and adjoining glaciers which are outside the present boundary.

The proposal is designed to eliminate all private uses, including mining, trapping, and subsistence hunting (pp. 144, 146, 152). Possibly provision should be made for all current bona-fide uses to continue until the individual involved discontinues such use. This could be done under a permit system.

] 1

Lack of coordinates on the maps makes it very difficult to match material on other maps. All geographic locations mentioned should show on the maps.

Description of the Proposal

P. 2. The table indicates 1.6 million acres in each addition, whereas, the text indicates 1.7 million acres in each addition. The discrepancy should be corrected.

P. 5, paragraph 2. Other areas, in addition to Kantishna, have had mineral production, including a deposit inside the park as recently as 1970 or 1971.

P. 17, D, second paragraph. BLM does not have authority for game management or law enforcement. Fire control should be added as a major coordination need.

P. 22, D-1 Lands. To eliminate any possible misunderstanding, we recommend deletion of the words "unreserved public" from the first sentence.

The last sentence is not correct. D-1 lands will not become open to public entry unless they are so classified. This sentence gives the opposite conclusion. The entire last sentence should be deleted.

P. 23, Map. Needs to be updated to reflect current status.

Description of the Environment

P. 40, paragraph 2. Trade and Manufacturing Site patents, if now being issued, are based on prior existing settlement. There have been none since issuance of PLO 4582 on January 17, 1969.

Paragraph 3. There has been no new settlement along the highways in five years. Development is on prior existing claims, most of which are privately owned.

P. 53. Reference to the Tanana and Nabesna people, who do not use the proposal area, serves no useful purpose and should be deleted.

P. 56. "Some local people ... by mining companies coming into the area from other parts" The statement is conjecture and misleads the readers into believing that mining companies are principally involved. Such is not necessarily the case.

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P. 72. An apparent inconsistency should be clarified for the general public--75.7 inches of snowfall versus a 20-inch snow pack.

P. 79, Map. The map fails to show the mineral areas inside the park.

P. 82, paragraph 3. Noting the coal reserves outside (adjacent to) the park constitute only 0.10 percent of the estimated Alaska reserves is very misleading to the general public. It should be noted that these reserves are currently being mined and are part of a very small portion of Alaska's reserves being serviced by transportation facilities. They are, therefore, of much greater importance than most other reserves.

P. 85, paragraph 3. The statement concerning the availability of ground water may be true for the mountain area of the park proposal but is questionable in regard to the northern extension. D. J. Cederstrom in "Ground-water Hydrology in Alaska" states: "The Tanana Valley ... with its gravelly fill was found to be one of the most prolific sources of ground water in the world. Nearly all of the north extension lies in the Tanana Valley.

P. 106. As written, the section on the wood frog implies a rare species found primarily at Wonder Lake. Such is not the case, since BLM personnel have found several in the Fairbanks area.

P. 121, B. Probable Future of This Environment if Proposals Are Not Enacted

This section is slanted toward the most negative impacts of non-NPS management. In actuality, multiple use management options available, coupled with state and Federal regulations regarding environmental quality, could achieve resource objectives in most areas. The section should be rewritten to show both sides of the management future, not just the negative side.

P. 121, B, line 2. The first word should be might, not would. Availability of the lands for the many uses listed would depend upon future classification.

P. 121, B, second paragraph. "Improvement of the trail from Healy to Stampede would create increased pressure to upgrade and reopen the existing park road to private auto traffic." The reasoning set forth in this statement does not seem valid unless the trail was constructed all the way to Katishna so that a loop road resulted. As written, the statement is untrue and should be reconsidered in the final 102 statement. Perhaps Healy to Kantishna was intended.

P. 122, paragraph 3. It is unlikely that any mining would contribute to a significant increase in air pollution. This is particularly true in a windy area as in the Alaska Range. Smelters would contribute to air quality degradation, but there is no reason to believe one would be built in this area.

20

As stated above, significant air pollution from mineral development is unlikely, though stream pollution is possible.

Environmental Impacts of the Proposed Action

P. 123. The EIS states that no sport hunting of any kind will be permitted in this proposal. Since the McKinley caribou herd numbers 10,000, the EIS should discuss how the NPS proposes to keep the herd in balance with its food supply and, if overpopulation and overgrazing do occur, indicate what control measures the NPS would utilize.

21

The EIS did not discuss how increased visitor usage, aircraft, snowmobiles, and ATVs would affect sensitive wildlife species, such as the grizzly and brown bears, caribou, and wolves.

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P. 124. "Exclusion of residential development ... will help to perpetuate waterfowl populations." Again this is misleading, since waterfowl nesting areas rarely are suitable for residential use.

23

Pp. 126, 127. Kantishna - "almost deserted mining community," "now deserted mining settlement," "approximately 25 seasonally-used structures ... Kantishna area." There is an inconsistency in describing the Kantishna area. The settlement is used in both mining and the pursuit of recreation.

24

P. 128, last paragraph. "Heavy snowmobile use ... visible scars." This statement is questionable, particularly if seasons of use are limited to periods of adequate snow cover through the implementation of the new ORV regulations.

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P. 130, first paragraph. "Wells ... except from silty glacial streams." The thought trend started with the potability of well water before it was lost to the silty glacial streams.

26

P. 133, first paragraph. "... this impact (of the proposal) should be negligible, however, since no use is known to occur" Yet on p. 54 it is stated that the magnitude of subsistence use and of trapping and hunting is unknown. The play-down of subsistence use is unwarranted and misleading.

27

P. 134, second paragraph. "The impact ... on sport hunting and guiding ... limited to a relocation ... relatively few individuals." This statement is inconsistent with p. 133, where it is noted that sport hunting and fishing are important sources of income, and with p. 90 and p. 124, where it is implied that the reduction in the size of the caribou herd results from "... significant hunting pressure on caribou and localized pressures on grizzlies and wolves."

28

P. 138. The section on road construction is written in a rather threatening manner, perhaps indicating a preconceived idea that no road construction will be allowed. Similarly, the indication that economical road access would be denied the Kantishna-Stampede area, which today is recognized as having a great potential for antimony and other base metals, including copper.

P. 139, first paragraph. "Regional transportation needs would not be significantly compromised since no population centers or areas of high resource utilization are involved." It is apparently overlooked that one of LUPC corridor proposals crosses this area to serve the upper Kuskokwim population centers as well as the mineral-rich Stampede-Kantishna area.

29

P. 143, *et seq.* This section looks at mineral areas with a local or parochial view. These are high potential mineral areas, and have significant potential for contributing to the national mineral need.

P. 144, last sentence. This is not entirely true. There is considerable potential within the area, including the existing park.

30

P. 145, second paragraph. Coal production and potential impact is slight. As noted in the comment on p. 82, this statement is misleading since access is a controlling factor in coal production.

31

P. 145, last paragraph. Impact on mining--increased restrictions. Presently, the access is so poor that mining requires air support and can operate economically only at peak market conditions. Any increased costs will restrict mining even more, or even preclude mining. Since this is an adverse impact and since immediate acquisition of inholdings is not part of the proposal, this impact should be developed further.

32

P. 147, first paragraph. The number of inholdings noted here does not go along with those set forth on p. 42.

33

Unavoidable Adverse Environmental Impacts

P. 151, last paragraph. "... lightly used by Natives ...," "... less (sic) than 20 people" These reference the magnitude of use which is noted as unknown on p. 54.

34

P. 152, second paragraph. "None of the proposed area is heavily used for hunting." This is diametrically opposed to statements made on p. 124, which state that significant hunting pressures occur on caribou, and locally on grizzlies and wolves.

35

It is stated that three or four mining companies are active within the park and the proposed extensions. It should be discussed how existing operations would be controlled to protect water quality, aesthetics, and wildlife habitat.

36

Relationship Between Local Short-Term Use of The Environment and The Maintenance and Enhancement of Long-Term Productivity

P. 153, fourth paragraph. "The area, acting as a protected reservoir for native wildlife, will ... thus providing for better hunting, trapping, and ... within the greater region." If animal's range is wholly included in the protected area, he will live and die there. External forces or migratory habit will create the exception.

Irreversible or Irretrievable Commitments

P. 155, third paragraph. "Elimination of mining would affect a maximum of 15" It is true that the short-term effect would be to the existing patents and claims. However, what of the long-term effects on the nation of locking up an area having significant potential for antimoney and other base metals such as silver, copper, gold, and lead?

37

Alternatives to the Proposed Action

Most of the alternatives consider increasing the size of the major proposal. Possibly more consideration should be given to trimming off areas that are not necessary for good park programs and management. Alternative 2 (p. 163), which would exclude the waterfowl area south of Lake Minchumina, has much merit since the NPS is not principally involved in waterfowl management.

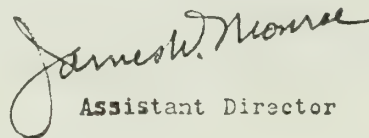
Except for the alternative of no action, the alternatives given have no particular objective. As they are written, an infinite number of alternatives exist. The alternatives do not establish how they would accomplish the objectives of the proposal better than the proposal.

P. 163, first paragraph. Moose calving areas do not seem to require the protection that other animals' calving, or similar, areas require. For example, the Anchorage, Matanuska Valley, and Fairbanks areas support moose.

Pp. 210 et seq. These alternatives do not really consider the possibilities; rather, they list only the feared bad features. They discuss only the land, but little consideration is given to alternate management possibilities, either by NPS or by others.

Regulated hunting and trapping, for instance, should be considered as an alternative. The entire proposal automatically rejects these uses without consideration of studies or the biological impacts on habitat of a no-hunting policy.

P. 212, last paragraph. The reason the park was established was because of the wildlife and surface values, but it was established in such a way as to make the mineral values, which were recognized as significant, available. NPS does not appear to be following this basic mandate.


Assistant Director

38

RESPONSE TO COMMENTS BY
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

1. Subsistence uses and valid existing mining claims on these lands will be recognized under the provisions of this proposal. See response to SCS comment 7.
2. A map with grid coordinates has been added for easier reference.
3. The correct figure is 1.6 million acres for each proposed addition. Correction has been made.
4. Reference in the text is to major areas of mineral production. It is recognized that mineral production has occurred on a much smaller scale in other locations. It is thought that these mostly inactive, outlying claims do not have the status of major known mineralized areas.
5. These corrections have been made in the text. Thank you for bringing them to our attention.
6. Deletion of this phrase has been made, as has clarification of the land status question. The technical point on land status is recognized; however, it is our assumption that no action on the proposal is most likely to result ultimately in some type of public multiple-use management for these lands.
7. The map has been revised and now reflects current status of these lands.
8. This statement has been deleted.
9. The statement in the text refers to development, not settlement.
10. The section has been deleted.
11. This statement has been deleted to insure objectivity in evaluating the importance of mining.
12. It is thought that the distinction between snowfall, the amount of snow as it falls, and snowpack, the depth of snow in its compacted state on the ground, is clear to the general public.
13. The map has been revised in this regard.
14. A discussion of the importance of the ongoing mining operation in this area appears in several places in the text.

15. There has been no drilling in the proposed northern addition, and extrapolation of data from elsewhere in the Tanana Valley would be highly speculative. The text has been changed for clarity. See USGS comments, this chapter. The NPS proposes further investigation of water resources in the proposal area.
16. Such inference is not intended. The text has been revised on this point.
17. This section has been revised for greater objectivity. We have attempted to show all sides of the management issue to assure the wisest and best use of these lands. However, it should be noted that the future environment includes area in the locality that is not limited to BLM administration only.
18. See response 6, this letter, regarding the disposition of these lands.
19. This statement was incomplete, but has been amended in the text.
20. This supposition is based on the premise that mining activities would also significantly increase. Since the air quality is at present very good, a significant increase should not imply "smog" conditions.
21. The National Park Service will maintain habitat in its natural state. Cooperative management with the Alaska Department of Fish and Game, BLM, USFS, and others is understood as a necessary requirement in managing these wildlife populations, especially migratory animals. If overpopulation and overgrazing should occur solutions will be sought cooperatively.
22. Visitor use in critical wildlife habitats will be controlled. ATV use is restricted to existing roads. Snowmachine use is confined to established routes by special regulations. Aircraft use is controlled by special regulations. By means of regulation and other control measures as may be necessary, visitor impacts on wildlife should be minor.
23. It is recognized that siting of houses will probably not occur on waterfowl nesting areas. Concentrations of people occupying residences near nesting areas, however, do affect surrounding wildlife merely by their presence and activities.
24. Changes have been made in the text for clarity and consistency. Kantishna is a seasonal mining community, still in use.

25. The sentence has been amended to reflect the importance of adequate snow cover for snowmobile use.
26. The sentence has been revised for clarity.
27. This paragraph and other references to subsistence use have been amended in many places throughout the text. Additional information as to present subsistence activities is included in the text and in Appendix G. See also "Legislative Proposal," Chapter I.
28. Economic impacts on guiding is more fully treated in the section "Impacts on the Local Market Economy." A substantial portion of the hunting occurring in the proposed additions is done without the services of a guide, so the impact of excluding sport hunting would be significant for wildlife and sport hunters but less so for the guiding industry.
29. This statement has been deleted.
30. The sentence has been rephrased for clarity.
31. This fact is now recognized in the sentence, which has been revised.
32. Within the Cooperative Planning and Management Zone any NPS proposal to place restrictions on mining operations would necessitate the concurrence of the Bureau of Land Management, the State of Alaska, its local subdivisions, and the Native Corporations or villages involved. It is thought that through this extensive review process actions detrimental to any or all of the parties involved will be identified and avoided.
33. Correction has been made of this error. There are 15 mineral patents and 45 claim groups in the proposal area.
34. Changes have been made in the text for consistency and accuracy.
35. Change has been made in the text for clarity. "Significant" was not meant to imply "heavy."
36. These controls will be formulated after a detailed study of the operations has been made to insure that the needs and interests of all interested parties are known. Every effort will be made not to unduly compromise the productivity of these operations. It would be premature, however, to speculate on the nature of these controls before such a study is made and all input evaluated.
37. As is stated in this section, the minerals will not be "locked up" or lost; rather they will be "on deposit." If the long-term needs of the Nation should be such that extraction is necessary, Congress can alter the park management or disestablish the park to allow for such activity.

38. The alternatives considered are properly alternatives to a national park of the objectives, dimensions, and scope proposed; not alternative management policies for wildlife population management. Any such park will cooperate with the State of Alaska on wildlife population management.



United States Department of the Interior

BUREAU OF MINES
WASHINGTON, D.C. 20240

June 28, 1974

DES 73-83

Memorandum

To: Chairman, Alaska Planning Group, Office of the Secretary

Through: Assistant Secretary--Energy and Minerals

From: Director, Bureau of Mines

Subject: Draft environmental statement, proposed additions to
Mount McKinley National Park, Alaska

Our Alaska Field Operation Center, Juneau, has reviewed the draft environmental statement for the proposed addition to Mount McKinley National Park, Alaska. The following comments are offered for your consideration.

There seems to be undue concern over the disturbance of 0.15 percent of the total park area based on land under mineral claim locations. Furthermore, this estimate is probably many multiples too high as only a small percentage of most mining claims is ever disturbed. In view of the ever-increasing mineral shortage, we, therefore, remain concerned with the proposed plan to close to mining the existing park--open to mineral search since its 1917 establishment--and its proposed additions until more can be learned of their mineral potential.

We can not agree with the statement (page 5) that "All major potential mineral production areas have been excluded from the proposed boundaries except Kantishna, which has had mineral production in the past." This implies that all mineral resources within Mt. McKinley Park and its proposed additions are known. This is far from being true. This sentence can be corrected by adding the word "known" to make the sentence begin: "All known major potential...." In essence, the statement's assessment of mineral potential is obviously down-graded so that minerals appear to be of little consequence.

To the contrary, the assessment of tourism is seemingly exaggerated. Rather than identify the numbers of past park visitors, statewide figures are used that may or may not relate to park visitors. All national parks keep accurate accounts of their visitors and the statement should report past visitor tallies at Mt. McKinley Park. Then, based on the percentage of past park visitors to that for the whole State, a projection for years ahead

could be estimated based on the State's projections. We do not believe, because of the reasons listed that make the whole State attractive to visitors, that Mt. McKinley Park will gain much if any, percentage-wise, on the whole of the State in the future. We might suggest that the percentage growth of wages in Alaska's tourism industry during 1964-70, as shown on page 66, be adjusted to a constant dollar by a reliable deflator that accounts not only for the general inflationary spiral but for the higher than average wage increases in the State. We also suggest an addition where the 1972 Rick and Tussing study on tourism is quoted to the effect that the economic impact of the National Park System in Alaska is small relative to its potential, primarily because of the undeveloped structure of the Alaska economy. Taken generally, tourism is a factor of economic health and because economic growth in Alaska will primarily depend upon growth of its extractive industries, land decisions that will take additional vast areas from production will, in part, defeat the basic premise of the need of more tourist potential.

We suggest, too, that the discrepancy between the average of 42.4 days per Alaska visit in 1971, as determined from the referenced material on page 65, and the 13 days per visit, taken from the referenced material on page 68, be resolved. Although we do not wish to belabor the point, former Senator Ernest Gruening, in his statement to the Federal-State Joint Land Use Planning Commission in 1973 reported that in 50 years of park administration practically no commercial development (hotels, etc.) has taken place, and that the low volume of tourists makes it a very risky venture for concessionaire operation of accommodations in the park.

Page 55, last sentence: There apparently is a misstatement here. All mineral locations shown on the Land Ownership Map are within the outlined areas of park boundaries and the cooperative planning and management zone boundaries.

Page 79, Mineral Areas Map: The Geological Survey's Open-File Report, Metal Provinces of Alaska, by Allen L. Clark and others, 1972, shows that Mt. McKinley Park and its proposed additions are in overlapping and proven metallogenic provinces. Geological Survey Bulletin 1242-B shows one area of the Nenana Coalfield partly within park boundaries. In addition, the small coalfield on Costello Creek and the northern portion of the Susitna coalfield may be within the proposed park additions. These should be shown on the Mineral Areas Map and included in the narrative description. Also, the Broad Pass field is included in the Area of Ecological Concern.

Page 82, 2d paragraph: We suggest the following substitution: "The planned southeastern boundary of the study area borders on the very northern boundary of the Cook Inlet Tertiary Province, a geologic province that has known oil development in the southern portion but has had

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little or inconsequential exploration activity in the northern portion. The northwestern boundary of the study area, however, would also appear to overlap into portions of what is referred to as the Minchumina Basin--a geologic province outlined by the Geological Survey in Bulletin 1094. Although relegated to lesser status in terms of becoming a petroleum province, the Minchumina Basin has not had enough geologic or geophysical work to completely discount it as a potential petroleum province. There has been no exploratory drilling in the basin to determine potential one way or the other, but the lack of drilling has been the result of many factors, geologic discouragement being only one of them."

Also on page 82, the following is suggested as a substitute for paragraphs three and four: "Coal-bearing rocks of the Nenana field (Healy-Suntrana area) occur adjacent to the north boundary, both in and out of the existing park. No additional coal lands of the Nenana field appear included in proposed park additions. Resources of the total Nenana field are estimated by the Geological Survey at 6.9 billion tons. The reserves immediately inside and outside the existing park (12 million tons) constitute less than 0.10 percent of the estimated total coal reserve in Alaska. Heating value of the coal, which is subbituminous, averages about 8,400 Btu's per pound on an "as received" basis."

Page 145, 2d paragraph, 3d and 4th sentences: These sentences contradict each other. The second sentence should be changed to read: "No additional known coal lands are included in the proposed park additions and all of the present coal production area lies outside existing boundaries."

If part of the Susitna field and the small field on Costello Creek are included in the proposed park additions, the impact of withdrawal should be discussed. Also, the impacts of withdrawing the Broad Pass field, included in the Area of Ecological Concern, should be discussed.

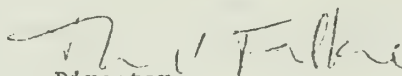
Page 145, 3d paragraph: This sentence, "The proposals are not included in any of Alaska's defined petroleum provinces, indicating that there is no known potential for the development of petroleum reserves within the proposed boundaries," should be corrected or omitted (see our comment relative to page 82 regarding oil and gas potential).

Page 152, last sentence: Here again is the implication that the location of all mineral deposits is known. This sentence should be changed to begin: "The most important known mineralized areas...."

As reported in our environmental statement reviews of other proposed national parks, we find it hard to reconcile the addition of Areas of Ecological

Concern, in this case amounting to as much as 346,000 acres, under the provisions of the Alaska Native Claims Settlement Act. Further, we are puzzled over the wisdom of adding an additional 1.8-million-acre Cooperative and Management Zone. This seems designed to extend Park Service management to resource development outside park boundaries. Under the coded purposes for which the Park Service was created, it appears doubtful that management of what is multiple use land lies within its jurisdiction.

In summary, we reiterate the view that the environmental statement contains some unfounded suppositions regarding mineral potential, namely, that the high-potential areas are all outside the proposed park boundary. Every consideration should be given to excluding these areas as well as those that have had past production from the proposal area. Because of the magnitude of the decisions that will withdraw these areas, a mineral survey, such as those now being made by the Geological Survey and the Bureau of Mines in proposed national forest wilderness areas, would add substantially to the background needed by Congress to better judge the whole of the proposal's potential commitments.


Director

RESPONSE TO COMMENTS BY
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

1. The amendment has been made as suggested. In addition, the "Economic Geology" section has been extensively revised to include more recent USGS data as to the mineral potential of the proposed additions.
2. Data on park visitation have been added in the section describing the existing park. Preliminary forecasts of park recreational use have been made and are included in a revised section dealing with the tourism and services industries. Additional data have been provided on most current reported out-of-state visitors to Alaska, tourist expenditures in the State, and employment and wages in the tourism services sector, based on material developed by the State's Department of Economic Development. Difficulties remain in applying statewide tourism expenditure data to the Mount McKinley Park region, since park visitor statistics do not include place of residency of visitors - whether Alaska residents or out-of-state tourists. Projection of future park visitation increases has not been based on increases in out-of-state tourism since no reliable data are available on the proportion of residents to nonresidents who currently visit the park.

Revisions have been made in the discussion of tourism and services industries to include most current data available. Table 4, Comparison of Wages, 1964-1970 has been updated to include 1972 data. The figures have been adjusted for inflation as indicated.

Alaska's economy has been experiencing independent growth in the support sector, encompassing the trades and services of the tourism industry, and this has been sufficient to keep total employment growing at seven percent per year in the absence of growth in basic industry - oil and gas, timber and fisheries (Tussing, 1974). Economist Tussing states: "Despite the general validity of the economic base approach in explaining long-term regional growth trends, ...it is not very useful in predicting the year-to-year state of the economy." (Tussing, 1974).

We have omitted the second paragraph quoted from "Strategies for Economic Development Alaska," and provided the updated and revised figures for numbers of tourists, employment and wages in the tourism sector.

3. Reference is made in this sentence to the area of ecological concern (defined in Chapter I, Section C), and not to the Cooperative Management and Planning Zone.
4. The map has been revised for greater accuracy. Additional information as to the location of coalfields in the area has been added to Chapter II.
- 5,6. This information has been added to the paragraphs in question.
7. No fields in the area of ecological concern are to be withdrawn. Cooperation in the management of operations in these areas will be sought to minimize adverse effects on the park. Revisions have been made in the text for clarity.
8. This sentence has been revised.
9. As before, this change has been made to reflect the current state of knowledge concerning mineral potential of this area. The lack of conclusive information as to mineral occurrence in the area is recognized.
10. The National Park Service does not seek to manage lands outside park proposal boundaries. AEC's have been designated to give the NPS opportunity to enter into cooperative agreements with adjacent landowners in order to protect park resources. No control can be imposed on landowners in AEC's by the NPS. See response to comment 9, Department of Commerce letter.



United States Department of the Interior

BUREAU OF RECLAMATION
WASHINGTON, D.C. 20240

IN REPLY
REFER TO: 150
120.1

Mr. Theodor R. Swem
Chairman
Alaska Planning Group
Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

This is in reference to your December 28, 1973, transmittal of the 28 draft environmental statements in regard to the Alaska Native Claims Settlement Act of 1971.

Since we have only peripheral experience in the subject matter covered by these statements and considering the fact that we have no jurisdiction in Alaska, we do not plan to review and comment on these statements.

Sincerely yours,

Commissioner



United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VIRGINIA 22092

OFFICE OF THE DIRECTOR

DES 73-83

AUG 12 1974

Memorandum

To: Chairman, Alaska Planning Group

Through: *gust* Assistant Secretary--Energy and Minerals *Bul*

From: Director, Geological Survey *AUG 14 1974*

Subject: Review of draft environmental statement for Proposed Mount McKinley National Park

We have reviewed the subject draft environmental statement as you requested in a memorandum of December 28.

The subject statement does not recognize the relative importance of the mineral resource potential of the region, particularly the Kantishna Hills, and the possibility of massive sulfide deposits in the southern part of the proposal area. The report gives the impression of favoring environment/wildlife protection and, although it professes to offer advantages to the public to experience this wilderness, no means are provided to do so.

There is some possibility for gas in the Tertiary coal basins which front the Alaska Range. The coal potential is high in older Tertiary rock underlying the Nenana gravels, although mining may not be economic due to the thickness of overburden. There is good possibility that coal-bearing Tertiary rocks occur beneath the surficial deposits west of McKinley River. The "gold belt" along the south part of the withdrawal has high potential for copper, gold, molybdenum, lead, and silver. Recent mapping by the Geological Survey has indicated a high potential for porphyry copper deposits and molybdenum.

The conclusions concerning the impact of the proposed expansion of the park on water resources and related aspects of the environment are inadequate. These conclusions essentially are limited to two generalized sentences on potential adverse impact caused by future facilities and

the statement that, "Elsewhere, impacts are expected to be localized and minor in importance." The favorable impacts on water resources of a larger park area are not mentioned.

Most of the material on pages 129-130 in the section "Impact on Water Quality" properly belongs on pages 62-65 in "Hydrology" under "The Existing Environment." Also, the statement on page 85 about the availability of ground water should be qualified by a statement as follows: "however, ground water is present and available in the unfrozen alluvium of the large, braided, glacial river valleys within the park." We suggest that data on the abundance and quality of water within the proposed park and the area of ecological concern be presented in the description of the hydrology.

We have not collected any long-term surface-water data within the proposed national park. However, a USGS open-file report which contains some limited data on water availability and quality in the present park is available (see Zenone, 1970, Water-resources investigations of Mount McKinley National Park, Alaska). Daily discharges and/or annual maximum peak discharges as well as a limited amount of water-quality data, are or have been obtained in the area of ecological concern at the following surface-water sites:

Gaging stations

Susitna R nr Denali
Susitna R at Gold Creek
Seattle C nr Cantwell
Nenana R nr Healy
Tetlanika R nr Lignite

Crest-stage gages

Paft C nr Denali
Chulitna R nr Talkeetna*
Lily C nr Cantwell
Nenana R nr Windy*
Slime C nr Cantwell
L Panguingue C nr Lignite
Rock C nr Ferry

* Daily discharge records also are available for previous years.

We have no plans for specific gaging stations in the proposed park or the area of ecological concern as part of our network plans. However, a station is proposed near the mouth of the Kantishna River, which drains most of the north side of the park.

The environmental statement indicates on page 12 that a natural resources management study is proposed. Water-resource data on glaciers, stream-flow, ground-water availability, quality of water, etc., would be an important part of any study of the environment.

Our specific, detailed comments regarding mineral potential of the area and related geologic matters are attached.

Henry W. Condit
Acting Director

Attachment

Specific Comments on

Proposed Mount McKinley National Park

DES 73-83

Page 5, line 9: The statement that "all major potential mineral production areas have been excluded from the proposal boundaries except Kantishna" is misleading because there have not been sufficient geologic and geochemical investigations to determine where the major potential production areas may be.

Page 21, lines 1-6: It is not clear what "geologic phenomena" need to be preserved and how they would be preserved.

Page 29, line 6: We do not understand why Medfra is used as a reference point. It is more than 100 km west of the proposal area.

Page 38: Lands (although not "State lands") immediately north of "the park" have a potential for "mineral extraction."

Page 39, line 14: The reports of the U. S. Geological Survey and Bureau of Mines indicating that development of mineral zones have begun and will increase in the future should be referenced.

Page 75, line 13: We suggest that this sentence read, "Tertiary sedimentary and volcanic rocks occupy lowlands within the Mount McKinley Park and also form east-west trending ridges along the north flank of the range."

Page 75, line 19: It should be mentioned that Mount McKinley and Mount Foraker are granitic plutons (GSA Bull., v. 84, p. 2596-2604).

Page 76, line 4: There is no convincing geologic evidence that this schist is Precambrian in age.

Page 76: The first two paragraphs on economic geology are about regional geology and should be woven into the geology section. The usage of "Precambrian" is a problem. Perhaps the rocks north of the fault could be discussed in the following manner: "Rocks immediately north of the fault consist of a regionally metamorphosed middle Paleozoic and older sedimentary sequence of sandstone, siltstone, limestone, and argillite." The Tertiary rocks (i.e., Cantwell Formation) contain abundant volcanic rocks. The upper part of the Cantwell Formation is predominantly volcanic flows and tuffs.

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Page 77, line 3: The Denali fault has not controlled emplacement of the granitic rocks. Rocks south of the fault are characterized by a sequence of predominantly dark gray argillite, slate, graywacke, and a few intervals of limestone of late Paleozoic (?) and Mesozoic age.

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Page 77, line 7: This statement is not correct. The granitic rocks south of the fault (Mount McKinley sequence) are of a different chemistry (quartz monzonite and granite) and age (55-60 million years) than rocks along the Denali fault (granodiorite, 33 million years).

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Page 77, line 18, and page 143, lines 15-18: This is a complex and difficult sentence to understand. Is the meaning, "There is a probable existence of significant metallic resource potential in the Kantishna-Stampede district despite its relatively modest production record"?

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Page 79: The mineral areas map does not show all of the mineral areas. The attached map shows the mineralized zones in this area.

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Page 81; and page 182: To our knowledge, the University of Alaska has never mapped in the Purkeypile area. The U. S. Geological Survey made a reconnaissance geochemical survey of this area in 1967 (U. S. Geol. Survey open-file report 310). Stream sediment samples indicate that this area has a potential for lead, silver, tin, zinc, and beryllium mineralization. Current exploration by industry and investigations by the Geological Survey indicate that this property is the most promising tin discovery in North America in more than 10 years. Tin values are of minable grade and silver may exceed tin in value. The deposit lies adjacent to a "tin granite" and detailed geochemical investigations indicate that other areas along the granite are enriched in tin and silver. Extensive exploration work by industry is expected to be continued in this area in 1974.

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Page 82: The report makes no mention of the high potential in the southern part of the proposal area for massive copper-bearing sulfide deposits. Massive sulfide deposits north of Shellabarger Pass (approximately two miles west of the proposed boundary--although the exact location of the proposal area is not given in this report) have recently been described in detail (U.S. Geol. Survey Bull. 1342). The following statements from that report are pertinent to the proposal area: "Although the deposits may not be commercially exploitable at present, they are considered to be of special significance because such deposits have not previously been known in this little-prospected part of the Alaska Range and they have many similarities with economically important massive

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sulfide deposits elsewhere in the world" (p. 2). "The tenor of the massive sulfide bodies averages between 1 and 1.5 percent copper, 0.8 and 1.7 percent zinc, 0.9 and 2.4 ounces per ton silver, and less than 0.5 percent lead" (p. 1). "Regional geological maps are not available for this part of the Alaska Range. Judging from the results of our brief reconnaissance, however, the authors suggest that regional exploration for similar environments be conducted east and northeast within the Alaska Range in the direction of Mount McKinley" (p. 45). Areal reconnaissance mapping done in 1972 indicates that the same eugeosynclinal sedimentary and volcanic sequence continues eastward into the southern proposal area and that they contain several gossan zones similar to the deposit at Shellabarger Pass. This suggests that massive sulfide deposits probably occur in the southern part of the proposal area.

Page 87: The vegetation map appears to have some errors. Portions of the map shown as "Moist tundra" and "Barren or sparse dry tundra" are in areas of ice, snow, and rock. No vegetation is present.

Page 124: The last paragraph implies that mineral exploration is harmful to bears, wolves, and caribou. An excellent example of the coexistence of the mining industry and large mammals is present at Purkeypile where almost daily observations of grazing bear and caribou occurred in the valley of the drilling prospect. Also on page 209 the report states that mining activities would probably have little effect on wildlife populations.

Page 129, line 1: Some types of vehicles create little, if any, of the effects mentioned.

Page 144: The report has appropriately stated that the Kantishna District may have "a significant metallic resource potential" and has given the district's modest production figures. It would appear appropriate to mention that the commodity of greatest potential in this district is probably silver. The galena-tetrahedrite mineralization of some of the prospects sounds strikingly similar to Wood-River type mineralization. Several channel samples in this area assayed in excess of 100 oz./ton silver. This district is also an important producer of antimony. Wells (USGS Bull. 841F, p. 336) states, "The type of mineralization, the character of the ore, and the absence of appreciable enrichment indicate that the ore extends to considerably greater depths than those so far reached in the area by mining developments." The presence of cassiterite in the district also suggests that this district may be part of a tin belt in Alaska and related to the tin-silver mineralization at Purkeypile. This district requires detailed geologic mapping and geochemical sampling to determine its mineral potential.

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Page 144, lines 16-19: Although no "real potential has been demonstrated" none-the-less it has not been disproven. The area has never been mapped nor have geochemical investigations been done. This area has a potential for massive-sulfide deposits similar to those at Shellabarger Pass. See above.

19

Page 144, lines 23-25: The reason it "appears that almost all of the high production areas lie outside the boundaries" is because geologic mapping and geochemical sampling have not been done within the area of the boundaries.

20

Page 145, line 1: As near as can be determined, the proposed boundary comes within 1 km of the contact of the granite and country rocks. It is along this contact that tin deposits are most likely to occur. There is no reason to believe that base and precious metal deposits will not be found further than 1 km from the granite contact.

Page 145, line 18: Until geologic and geochemical investigations have been done the statement that the impact on the "mining and mineral entry in the region would be slight" is not supported by fact.

21

Page 149, lines 5-7: We suggest that consideration be given to excluding the Kantishna district, which the report states may have a "significant metallic resource potential" from the proposal area, as these five districts are.

Page 152, lines 20-21: We suggest the report discuss these "known deposits of economic importance within the proposal additions." At the least the location and commodities involved should be given.

22

Page 133, line 21: Here it is stated that the mineral resources in the proposal area are "limited," but on page 152, it is stated they are of "unknown size." In view of the Nation's increasing dependence on foreign sources for mineral requirements, it is important to locate, identify, evaluate, and inventory these resources before such investigations are prohibited.

23

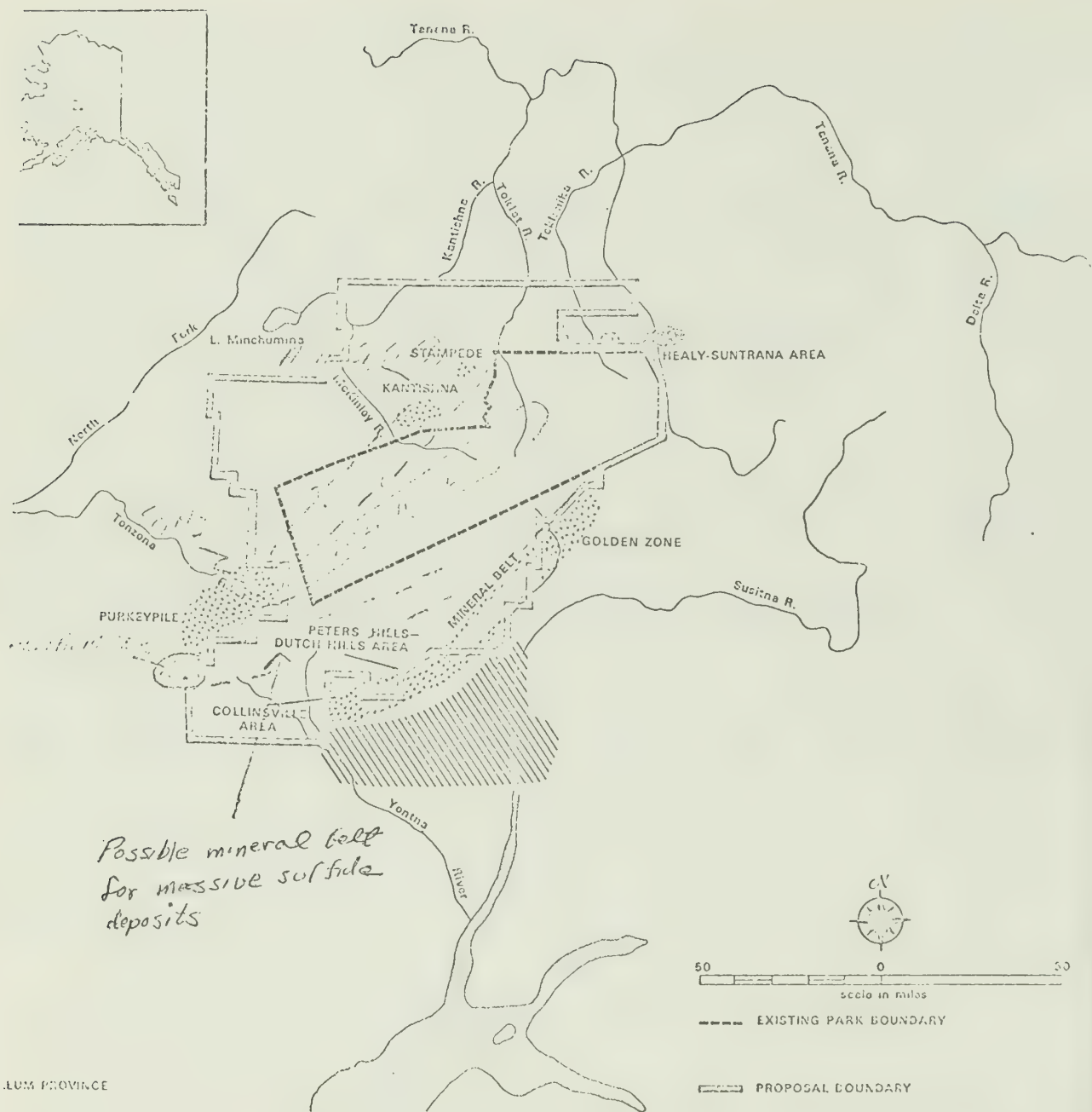
Page 154, lines 1-2: Serious impairment or destruction of the region due to mining can be eliminated by restrictions and conservation practices by mining operations.

Page 154, lines 18-25: We suggest that it is in the public interest to identify and evaluate the mineral resources before the area is withdrawn. How can a resource be developed if we don't know if it exists? See also page 156, last paragraph in this regard.

24

Page 205: The section on mining as a primary use emphasizes the possible detrimental effects without an unbiased presentation of the secondary benefits that could be derived from such activity. For example, the quality of water need not be reduced by mining. Mining in this area can be carried out with strong environmental protection laws. Consideration of construction locations and types of facilities can be planned to lessen the visual impact. Controlled access, consistent with the preservation of primary resource values, to mining areas would allow a greater number of people to interpret a more varied ecological, geological, and scenic environment, and would allow for a maximum of appropriate public use and enjoyment of the esthetic and ecological resources of the region.

25



YUKON PROVINCE

RESPONSE TO COMMENTS BY
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

1. The NPS is grateful for this information and it will be utilized in the proposed natural resources management study. The NPS concurs in the importance of water resource data to the study and will include such a survey when the research in the proposal area is initiated. Information from the Zenone study has been included in Chapter II, section 11.
2. The sentence has been revised to reflect the point you have raised. We recognize the limitations of present knowledge of the mineral potential of the area.
3. The sentence has been revised for clarity.
4. Medfra is used as a reference because it is the westernmost population center, along with McGrath, of the Mount McKinley region and is mentioned several times in the text of this statement.
5. This paragraph has been amended for clarity.
- 6-12. The sections of Chapter II discussing mineral potential and the geology of the region have been extensively revised to reflect the information contained in these comments.
13. The highly speculative nature of this mineral belt makes it unsuitable for inclusion in the map. The conclusion might be incorrectly drawn that the belt has been actually mapped, or otherwise shown to definitely exist.
- 14,15. Changes have been made in the text to include this information.
16. The sparse, dry tundra indicated occurs in small patches on some rocky or gravelly surfaces, and is thus impossible to isolate on a map of this scale. For this reason we have included it in a category with barren ground.
17. Opinions as to the degree of disturbance of wildlife populations by mining operations are many and varied (See Ginny Hill Wood comments, this chapter). It is most unlikely, however, that the presence of man and his activities will have no effect on nearby wildlife. The statement on page 209 of the DEIS is that mining operations will have "little further effect" on wildlife populations, indicating that some effect has already taken place.

18. This information has been included in the text.
- 19,20. Reference has been added to the text in regard to the lack of geological sampling necessary to evaluate potential. This section is not intended to imply that no such potential exists.
21. This statement has been qualified to indicate that the degree of impact is dependent on the presence or absence of suspected deposits. With the information now available, no more conclusive statement of impact can be made.
22. These deposits were discussed earlier in the text. The reader is now referred to the original discussion.
23. Page 153 is probably intended here. Amendment has been made to the sentence in question. See responses to comment 21, above, and the following comment.
24. In making D-2 land withdrawals and the recommendations to the Congress for management of these lands, a basic dilemma was faced which is implicit in a decision involving mineralogically unexplored lands such as those in Alaska. This dilemma was the choice between possible values of developable, nonrenewable resources such as minerals and the resource values inherent in natural and ecological systems.

In developing the final recommendations to Congress, the need to leave mineral resources available for development was given careful consideration. In the first place, some of the systems themselves herein advanced by those proposals contain the authority and objective of mineral development. And, it should be noted that the selections already made by the State of Alaska and the priorities provided the Native Claims under ANCSA have excluded from "Four System" consideration vast areas of mineral potential already. In many cases, boundaries of proposals were redrawn to place mineral belts of prime potential outside proposals with restrictive management categories. In other cases, management options were left open to mining where identified mineral potential was sufficient to warrant such action, and where mineral extraction would not prove overly damaging to the environment. However, in order to comply with the intent of section 17(d) (2) of the Act and in order to afford adequate protection of these outstanding areas, some areas which do have possible mineral potential were recommended for protective management that would exclude mining and mineral entry. These proposals reflect a need, set forth in ANCSA as a congressional mandate, to preserve certain outstanding natural and ecological areas of national interest apart from mineral development.

In regard to the request for a research program to inventory mineral potential in these areas, the park proposals provide that prospecting, mining, and the extraction of minerals or the removal of soil, sand, gravel, and rock will not be permitted, except for portions of Yukon-Charley, or where carried on pursuant to valid existing rights.

The National Park Service encourages and will participate in appropriate ways in the study of geological resources within proposals. Geological studies by recognized educational or scientific institutions, professional personnel of other Federal agencies, and accredited individuals will be permitted and encouraged when in consonance with the purposes of the area and the policies of the Service. Procedures which might result in damage or alteration to the resources would not be permitted.

25. This section has been revised for greater objectivity.

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ALASKAN REGION
632 SIXTH AVENUE
ANCHORAGE, ALASKA 99501
TELEPHONE 272-5561



JUL 12 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U. S. Department of Interior
Washington, D.C. 20240

Dear Sir:

This letter is in response to the request that we review the Draft Environmental Statement pertaining to the proposed Mt. McKinley National Park Additions.

We wish to bring to the Planning Group's attention that in any consideration of the airspace above the public lands in question there exists a public right of transit through navigable airspace and that the authority to control the use of navigable airspace and to regulate both civil and military operations therein lie solely with the Secretary of Transportation. This exclusive responsibility and authority is statutory (49 U.S.C. 1303, 1347, and 1348).

While each land withdrawal for specific public purposes has its own individual characteristics, each should be viewed in relation to the composite effect of restricting the use of land in exceptionally large tracts or restricted uses that abut upon each other. In addition, there are site location circumstances that occur from time to time which require that electronic aids to air navigation be located in areas for which there is not always an acceptable alternate location. In such circumstances, we would request that every effort be made by federal agencies responsible for land management to cooperate in the public interest in the safety of airways, just as agencies are asked to cooperate with federal objectives in land management.

We appreciate the enormity of the task that faces your group. We also appreciate the opportunity afforded us to comment upon the proposal.

Sincerely,


LYLE K. BROWN
Director

RESPONSE TO COMMENTS BY
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

1. The NPS recognizes the authority of the Secretary of Transportation, and this information has been added to Chapter I, in the section of "Interrelationships with Other Agencies." The authority of the Secretary of Transportation in the regulation of airspace use is recognized.
2. A detailed discussion of this matter appears in response to comment 1 of the USFS letter, this chapter.
3. As stated before, the NPS recognized the authority of the Secretary of Transportation and will cooperate in the placing of these aids.



U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
412 Mohawk Building
222 S. W. Morrison Street
Portland, Oregon 97204

July 16, 1974

IN REPLY REFER TO
10-00.33

Mr. Theodor R. Swem, Chairman
Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

Your December 28, 1973 letter provided copies of the DEIS #73-83 to the FHWA for review and comment concerning the National Park Service's (NPS) proposal to increase the size of Mt. McKinley National Park in central Alaska from 1,939,493 acres to 5,150,000 acres. We appreciate the 120-day extension for review, which now ends July 22, 1974.

Our comments on the statement are enclosed for your consideration in further planning and preparation of the FEIS. We appreciate the opportunity for review and would like to receive a copy of the final statement.

Very truly yours,

A handwritten signature in cursive script, reading "Dale E. Wilken", is written over the typed name.

Dale E. Wilken, Assistant Director
Office of Environment and Design

Enclosure

FHWA REVIEW COMMENTS
ON
PROPOSED ADDITIONS TO MT. MCKINLEY NATIONAL PARK
DEIS #73-83

(1) Chapter I - DESCRIPTION OF THE PROPOSAL:

(a) It would be helpful if the NPS could include in the FEIS a brief discussion of land use planning activities under the provisions of the Alaska Native Claims Settlement Act. Specifically, we would appreciate a discussion of subsection 17(a)(1) of the Act which established the Joint Federal-State Land Use Planning Commission for Alaska (LUPC).

(b) The LUPC is developing statewide transportation system proposals and has received Alaska Railroad and Alaska Department of Highways proposals on surface transportation and utility corridors. The LUPC held public hearings in April 1974 at various locations throughout Alaska to present surface transportation and utility corridor proposals, and to obtain input on native concerns regarding surface transportation. We recommend that the NPS review these LUPC proposals, the public hearing testimony resulting therefrom, and provide further discussion in the FEIS regarding the effect of the additional national park classification on surface transportation corridors recommended to serve central Alaska.

(c) In the proposed National Park vicinity, the NPS has indicated five Areas of Ecological Concern (pages 16-17 and Proposal Map on page 3). These Areas involve an additional 346,000 acres and are considered by the NPS to have land and water habitats of comparable value to those habitats within the National Park proposal. We are concerned by what appears to be an effort by the Department of Interior to expand the land and water area under control of the NPS (and subject to NPS land use restrictions on utilization) even though the land may not be formally designated as part of the Mt. McKinley National Park. The effect of such proposals on any future transportation facilities within the boundaries of the Areas of Ecological Concern should be thoroughly addressed in the FEIS, including the Department of Interior's position regarding applicability of Section 1653(f) of the DOT Act of 1966 to such Areas.

(d) We are in general agreement with the NPS's objective #9 on page 7 of this DEIS regarding creation of a Cooperative Planning and Management Zone to the south and east of the enlarged Mt. McKinley National Park (Proposal Map, page 3). As noted on page 6, this zone would be established within the context of overall State land use planning efforts and would involve the Bureau of Land Management, the State of Alaska, its local political subdivisions, and the Native corporations and villages.

(e) Regarding the NPS's discussion on INTERRELATIONSHIP WITH OTHER PROJECTS AND AGENCIES on pages 17-19, there is no mention of other

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Department of Interior proposals in west-central, western and northwest Alaska, such as the Bureau of Sport Fisheries and Wildlife's Koyukuk and Yukon Delta National Wildlife Refuges, the Bureau of Outdoor Recreation's Unalakleet National Wild River, or the Department of Agriculture-Forest Service's proposal Yukon-Kuskokwim National Forest in central Alaska. Collectively, these other refuge, wild river and forest proposals, including the NPS expansion plans for Mt. McKinley National Park, could have a major impact on surface transportation planning. Therefore, we suggest a map and discussion of the collective impacts of implementing these proposals be included in the FEIS which would expand on the interrelationship of the above Department of Interior and Forest Service proposals and the total effect on planned surface transportation corridors in this vast region of Alaska.

(2) Chapter II - DESCRIPTION OF THE ENVIRONMENT: The Region--Transportation map on page 31 represents proposed railroad and highway corridors that were jointly submitted to the LUPC for consideration by the Alaska Railroad and the ADH. We request this map on page 31 be modified in the FEIS by indicating the routes are planned as surface transportation corridors. Such corridor identification will not necessarily result in highway construction, as modal decisions have not been made, nor can they logically be made until such time as the transportation needs of this vast region of Alaska become more evident.

On page 48, the NPS indicates that Nenana has been considered as a point of beginning for the extension of the interior highway system to the Arctic Slope and Seward Peninsula. It has been several years since this possibility has been considered; however, we understand Nenana is still a prime choice as a starting point for extension of rail transportation to the west and north.

On page 121, under B. PROBABLE FUTURE OF THIS ENVIRONMENT IF PROPOSALS ARE NOT ENACTED, the NPS notes that:

"State lands north of the park could be re-opened for homesite development. Commercial, residential, and recreational development would continue along the Anchorage-Fairbanks Highway and would probably also occur along an improved Healy-Kantishna Road."

It is suggested that reference be made to "surface transportation corridors" in the FEIS. This would allow the ADH and the U. S. Department of Transportation to consider alternative modes of ground transportation systems when environmental/reconnaissance studies are initiated in the regional transportation corridors mentioned on page 40 and as shown on the Transportation Map on page 31.

(3) Chapter III - ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION: We disagree with the NPS's assessment of IMPACTS ON TRANSPORTATION (pages

137-140), especially as their assessment relates to surface transportation corridors that were planned to serve central, west-central, western and northwest Alaska. The NPS assessment deals only with the immediate vicinity of the existing Mt. McKinley National Park and their proposed additions to the immediate north and south of the Park. The surface transportation proposals of the Alaska Railroad and the Alaska Department of Highways, as submitted to LUPC in July 1973, were designed to serve a vast region of Alaska. We, therefore, suggest that any assessment of the impacts of this NPS proposal to expand Mt. McKinley National Park on transportation should take into consideration the FHWA's review comments on Chapter I of the subject DEIS, item #1e above and fully address those comments in the final statement.

(4) Chapter VIII - ALTERNATIVES TO THE PROPOSED ACTION: This chapter includes four categories of alternatives: (A) no action, (B) alternative boundary locations, (C) alternative management concepts, and (D) alternatives to the conceptual master plan. Alternatives A and B-1 through B-4, if selected by the NPS, would be less restrictive as regards surface transportation planning in Alaska. We suggest these options be given further consideration when preparing the FEIS.

Alternatives B-4 through B-9 would have no apparent impact on existing or proposed surface transportation systems. However, Alternatives B-10 through B-14 would have varying degrees of impact on transportation facilities such as the Alaska Railroad, the Anchorage-Fairbanks and the Denali Highways and planned surface transportation corridors in central Alaska. Therefore, we urge no further consideration be given to Alternatives B-10 through B-14.

Regarding Alternative C-1, Multiple-Use Management as an alternative management concept for the proposed additional lands to be added to Mt. McKinley National Park, this option would be less restrictive than the NPS proposal as stated in Chapter I of the subject DEIS. Also, Alternative C-2, Primary-Use Management-Mining and Intensive Recreation would be less restrictive on surface transportation planning.

Alternatives D-1, More Intensive Development for Public Use and D-3, Natural Resources Management also would be less restrictive on surface transportation planning.

We, therefore, recommend the NPS give further consideration in the planning for the subject proposal to those alternatives which would be less restrictive on existing and proposed surface transportation systems which serve or would extend service to central Alaska.

RESPONSE TO COMMENTS BY
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

1. This discussion has been added to Chapter I, section D, with a discussion of FSLUPC input considered in the development of this proposal.
2. Alaska Railroad and Alaska Department of Highways surface transportation and utility corridor proposals made to FSLUPC have been considered in the development of this proposal. Transcripts of the public hearings will be available for consideration by Congress during the period of deliberation for this proposal. Discussion of impacts on transportation resulting from this proposal has been revised in many places in the text.
3. Initially we wish to allay the concern of the Federal Highway Administration for "what appears to be an effort by the Department of the Interior to expand the land area under control of NPS (and subject to NPS land use restriction and utilization) even though the land may not initially be formally designated as part of the Mt. McKinley National Park." Recognition must be given to the fact that "areas of ecological concern" are just that. These are areas of interdependent relationships to the proposal area in terms of wildlife habitat maintenance, maintenance of visual and scenic integrity, protective buffers around key waters and wildlife populations, interrelated vegetative and wildlife use patterns where degradation of one element could seriously alter the other and significant areas of cultural (archeological, historical, and sociological) relationship to the proposal or an adjacent Native culture or population. It is hoped that specific cooperative agreements can be negotiated with adjacent land managers and owners within the "areas of ecological concern" to insure complementary protection of the values and resources of the proposal, with control and management of such lands retained by the owners and managers.

Management of the proposals as well as the areas of ecological concern should include a mutual working dialogue between Federal landowners and surrounding land managers. It is reasonable that if landowners in areas of ecological concern are to consider managing their lands in a "manner compatible with proposal values," then in return their views should be considered within the limits of applicable laws and regulations in the management of Federal Lands.

It should be noted that agreements regarding Areas of Ecological Concern represent only one approach to protection of Federal lands, and that the broad authority given the Secretary under 43 U.S.C. 1361 remains unaffected by the legislative proposal.

We are not aware of any Section 1653(f) of the DOT Act of 1966. However, we assume reference is being made to Section 4(f) of the DOT Act of 1966, as amended, (49 U.S.C. 1653(f)). Any determination relating to the applicability of Section 4(f) to areas of ecological concern would rest with the Secretary of Transportation and would be based on the facts of record, i.e., land ownership and land use.

4. A reading of the proposals you reference and consideration of them along with this proposal gives a more complete description of regional impacts than can be included in this one document. See response to USFS comment 1 for a more complete discussion of this subject. A map depicting all of the withdrawal areas and their geographic relationship to each other has been supplied with this document; Legislative Documents appear in the appendix which present all 28 proposals.
5. Revision of the map legend has been made.
6. Reference to Nenana in this regard has been deleted.
7. This correction has been made.
8. While the suggested modifications have been made, the effect upon transportation, in our view, has been fully recognized in this EIS and explicitly stated where there is interaction. We wish to point out FHWA's assumption that the ADH's "potential" transportation plan of July 1973 is a fully coordinated and environmentally balanced plan in all respects. That assumption is questionable inasmuch as no environmental impact statement on the whole system has ever been prepared and circulated by FHWA. The assumption is further weakened by the fact that the State of Alaska and this Department reached general agreement on the d-2 withdrawal areas themselves nearly a year prior to public release of the "potential" transportation corridors in the July 1973 plan.

U.S. ENVIRONMENTAL PROTECTION AGENCY



ALASKA OPERATIONS OFFICE

Room G66, Federal Building

605 West Fourth Avenue

Anchorage, Alaska 99501

July 18, 1974

REPLY TO
ATTN OF:

Mr. Theodore R. Swem
Chairman, Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Subject: Draft Environmental Impact Statements
as listed on Page 3

Dear Mr. Swem:

The Environmental Protection Agency has reviewed the subject draft environmental impact statements and does not anticipate any significant environmental impacts resulting from these proposed actions as related to EPA's areas of expertise. The major impacts will be primarily economic due to the limited use these lands will be subjected to. We assume that if these lands are reclassified or if specific developments are authorized on these lands at some future time, an environmental impact statement will be written which considers the environmental effects of the new proposed land uses and EPA would provide comments at that time.

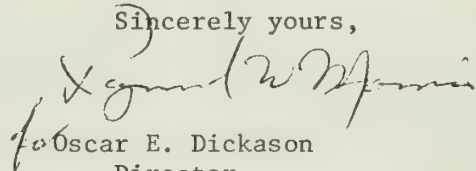
We are concerned, however, that these lands will be managed on an individual basis rather than in association with other surrounding lands and other planning agencies. Thus, for a given region where one of these proposals is located there will be at least three planning groups -- the Federal Government, the State of Alaska and the Regional Native Corporations. We suggest that provisions be provided that will allow the implementation of regional planning which would provide for the most effective resource management.

These draft impact statements have been classified as Category LO-1. The classification and the date of EPA's comments will be published in the Federal Register in accordance with our responsibility to inform the public of our views on proposed Federal actions under Section 309 of the Clean Air Act.

Definitions of the categories are provided on the attachment. Our procedure is to categorize our comments on both the environmental consequences of the proposed action and the adequacy of the impact statement at the draft stage.

If you have any questions concerning our categorization procedures, please let us know.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Oscar E. Dickason".

Oscar E. Dickason
Director
Alaska Operations Office

DRAFT ENVIRONMENTAL IMPACT STATEMENTS

Cape Krusenstern National Monument

Mount McKinley National Park

Harding Icefield-Kenai Fjords National Monument

Katmai National Park

Gates of the Arctic National Park

Chukchi-Imuruk National Reserve

Yukon-Charley National Rivers

Lake Clark National Park

Wrangell-St. Elias National Park

Yukon Delta National Wildlife Refuge

Arctic National Wildlife Refuge

Koyukuk National Wildlife Refuge

Togiak National Wildlife Refuge

Yukon Flats National Wildlife Refuge

Iliamna National Resource Range

Noatak National Arctic Range

Fortymile National Wild River

Unalakleet National Wild River

Porcupine National Forest

Yukon-Kuskokwim National Forest

Wrangell Mountains National Forest



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

22 AUG 1974

OFFICE OF THE
ADMINISTRATOR

Mr. Theodore R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

This is intended as an addendum to EPA's comments of July 18, 1974, on the draft environmental impact statements (EIS's) on the "Alaska Native Claims Withdrawal Proposals." We are enclosing several additional comments on the individual EIS's, however, you should be aware that these additional comments do not change the earlier rating as expressed in the July 18, 1974, comment letter.

We do not feel that the cumulative impact of the withdrawals upon the Alaskan environment has been addressed by these separate statements. Accordingly, we believe that it would be appropriate for DOI to prepare an overview or summary EIS to accompany the individual final EIS's which would address these cumulative impacts. The overview statement might include a map displaying the scheme of the area withdrawals in relation to areas of prime ecological concern and to the existing National Parks and Forests in Alaska. A view such as this would facilitate the reviewers' understanding of the total area involved. It would also be useful to differentiate between the management practices and authorities at National Parks, Forests, and Refuges within the overview statement. The EIS's relating to National Forest proposals, for example, included a useful chart summarizing the current management practices under National Forest and Wildlife Refuge administration. This chart might be expanded to include National Park and Wilderness Area administration.

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We appreciated the opportunity to review and comment on these proposals, and ask that this letter and attachment be considered part of EPA's official comments on the subject impact statements.

Sincerely yours,

A handwritten signature in cursive script that reads "Sheldon Meyers". The signature is written in dark ink and is positioned above the printed name and title.

Sheldon Meyers

Director

Office of Federal Activities

Attachment

RESPONSE TO COMMENTS BY
ENVIRONMENTAL PROTECTION AGENCY
ALASKA OPERATIONS OFFICE

1. The cumulative impact of these proposals is contained in the individual proposals considered cumulatively. See response to USFS comment 1 for a detailed discussion of this matter.
2. A map depicting statewide withdrawals has been supplied with the document.

UNITED STATES OF AMERICA
GENERAL SERVICES ADMINISTRATION
WASHINGTON, DC 20405



Feb 7
Mr. Theodor R. Swem
Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20405

Dear Mr. Swem:

As requested in your December 28 letter, the General Services Administration has reviewed the draft environmental impact statements in regard to the Alaska Native Claims Settlement Act of 1971.

Our review of these draft environmental impact statements discloses no problems of concern to this agency.

Sincerely,

LARRY F. ROUSH
Deputy Administrator for
Special Projects

STATE OF ALASKA

WILLIAM A. EGAN, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

P.O. BOX 80007
COLLEGE 99701

March 6, 1974

Theodore R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, DC 20240

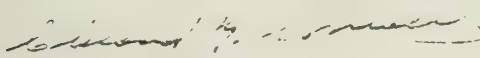
Dear Mr. Swem:

I have just reviewed the draft environmental statement DES-73-83 "A Proposal Mount McKinley National Park." I particularly object to your statement under "Impact of Mining and Mineral Entry." The statements contained are very misleading and contrary to fact. Metal production instead of continuing to decline as stated has actually started to increase in the district. Information supplied by producers in the area indicate that although the production did drop to a low of \$49,000 in 1970. Mineral production has increased to \$320,000 in 1973. This is more than a six fold increase in the last four years. I would also like to point out this attempt to lock up known mineral lands is contrary to the Mining and Mineral Policy Act of 1970. The Secretary of the Interior, Roger Morton, in an interview granted to the Forbes Magazine in February of 1974 indicated that he fully realizes that the United States may be short in minerals as well as energy in the near future unless action is taken now to alleviate these shortages. This impact statement that has been prepared is against the best interest of the United States, is contrary to the Minerals Policy Act, and is contrary to the actions of the Secretary of the Interior.

It is true that one of the metals produced in the Kantishna area is antimony. Antimony is one of the critical materials on which the United States almost entirely dependent on foreign sources. One of the uses for antimony is that of a flame retardant and the promulgation of new federal flame retardant standards will increase the demand for antimony. An attempt to lock up a potential domestic source of antimony would be contrary to the intent of the new federal flame retardant standards.

Therefore, I respectfully submit my recommendation that the Kantishna area be excluded from any increases in size of Mt. McKinley National Park.

Sincerely yours,


Cleland N. Conwell
Mining Engineer

cc: Don Hartman

RESPONSE TO COMMENTS BY
STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

1. This information as to production values was not available to this agency. Revision has been made in the text to indicate our lack of knowledge in this regard.

STATE OF ALASKA

OFFICE OF THE GOVERNOR

STATE PLANNING AND RESEARCH

WILLIAM A. EGAN, GOVERNOR

Phone 465-3512

POUCH AD - JUNEAU 99801

July 22, 1974

Mr. Theodor Swem, Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Attached hereto is the response of the State of Alaska to the 28 draft Environmental Impact Statements submitted by your office for review on January 3, 1974.

We appreciate this opportunity to comment on the draft statements, and hope that our review will be helpful to the Department of the Interior in the preparation of a comprehensive final Environmental Impact Statement relative to the proposed legislation known as The Alaska Conservation Act (S.2917), prepared and submitted by Secretary Morton.

Yours truly,

A handwritten signature in dark ink, appearing to read "R. W. Pavitt", with a large, looping initial "R" and a horizontal stroke extending to the right.

R. W. Pavitt, AIP
Director

STATE OF ALASKA

Response to the Draft Environmental Impact Statements for lands withdrawn under Section 17(d) (2) of the Alaska Native Claims Settlement Act, and proposed by the Department of the Interior for inclusion in the National Parks, Forests, Wildlife Refuge and Wild and Scenic Rivers Systems.

I. OVERVIEW

The comments contained in this report and the attachments thereto should be considered as the State's formal response to the Department of Interior's recommendations regarding land withdrawn pursuant to Section 17 (d) (2) of the Alaska Native Claims Settlement Act (Public Law 92-203). The comments apply to all 28 of the Draft Environmental Impact Statements and include the State's comments on seven of the proposals which were submitted on June 22, 1974.

The one overriding area of concern relating to all of the proposals is that each individual statement deals with a small area of Alaska and does not look at the impact on the State as a whole, nor even on a major region. The "major federal action" involved in the proposed implementation of Section 17 (d) (2) is the addition of over 83 million acres (130,000 square miles) of land in Alaska to the over 47 million acres already included in the National Wildlife Refuge, National Park, National Forest and Wild and Scenic River Management Systems. Although individual environmental impact statements can and should be required for individual federal actions, it is obvious that in this instance a single comprehensive environmental impact statement relating to the social, economic, physical and environmental consequences of the proposed federal action concerning 83 million acres is needed to comply with the provisions and intent of the National Environmental Policy Act. The State will demand and require that such an impact statement be prepared, as the examination of individual parts of the overall proposed action do not give a fair and accurate evaluation of the impact upon the State as a whole, and upon the nation as well.

The ultimate effect of the approval of the proposed actions would be to divide the State into a number of isolated enclaves having little or no relationship with each other. Such fractionalization can and will lead to serious administrative problems at federal, state and local levels, tend to break down the prevailing cooperative spirit for the solving of problems, and can only lead to serious adverse social, economic, and environmental consequences for Alaska.

Recognizing the imminent shortage of metals and minerals, Congress enacted the Mining and Minerals Policy Act of 1970. This Act requires an annual report to Congress from the Secretary of Interior on the state of the mineral industry both domestic and foreign, apprising the nation of domestic shortcomings. These reports have pointed out the increasing world demand and decreasing future supplies of necessary and strategic minerals. In his 1973 report to the Congress, Secretary Morton pointed out:

1. Energy and minerals are the life-blood of our industrial economy...";
2. "Development of our domestic resources is not keeping pace with our needs..."

The emphasis by the Secretary on these increasing mineral deficiencies both domestic and worldwide appears inconsistent with the creation of the proposed vast National Parks, Refuges and Wild and Scenic Rivers in Alaska's rich mineral potential areas. Many of the Draft Environmental Impact Statements have indicated that mining and mineral exploration will be one of the first activities which will be restricted or completely forbidden within the newly created management areas. In fact, the proposals of the Department of Interior contained in S.2917 actually employ language that would prohibit geological and geophysical studies to identify and evaluate the mineral content of many of these areas; even by the Department of Interior.

The State of Alaska has been described as one of the major remaining untapped storehouses of mineral wealth in the North American continent. Yet, only a very small part of the State has been geological mapped or subjected to geophysical exploration to determine the mineral potential. In nearly all of the Draft Environmental Impact Statements, a subtle argument has been presented suggesting that not knowing the mineral potential in an area is tantamount to it not having potential. This is then used to justify statements to the effect that the closure of these areas to mining and exploration will have only a slight impact on the State or the nation. This is, of course, a completely fallacious argument and must be most strenuously objected to.

It is the position of the State of Alaska that if long range plans are not developed now for the careful inventory of mineral resources and provision for supervised extraction of resources within the proposed withdrawals, as well as the remainder of the State, the time will eventually come when the minerals will be exploited under conditions of extreme national pressure, and with little regard to the ecology which they were proposed to protect. It is necessary that stipulations be reached to allow scientific research, inventory, and planned supervised extraction of natural resources as needed and required by the State and the nation prior to the final classification of any of these areas.

Within each of the 28 Draft Environmental Impact Statements there is a reference to a number of hearings which were held by the Joint State-Federal Land Use Planning Commission in regards to that particular proposal. However, the hearings held by the Land Use Planning Commission in May and June of 1973 were primarily concerned with eliciting the feelings and views of the residents of the State of Alaska on what the appropriate land use would be for the (d) (2) withdrawals. At the time of the Land Use Planning Commission hearings, the specific intentions of the federal agencies for classification of the (d) (2) were not known to the public (and probably not to the agencies themselves). One of the underlying purposes of the LUPC hearings was the possibility of the development of innovative management systems within the withdrawals which could accommodate the needs and wishes of the peoples of Alaska and of the nation as a whole.

Since that time the Department of Interior has distributed its proposals for classification of the (d) (2) lands, and the public has become more aware of Interior's intentions. Many people would like the opportunity to voice their opinions on the Department of Interior's controversial proposals at a public hearing. To facilitate this purpose, the Department of Interior, in all fairness, should hold public hearings on each of the specific proposals in the area to be affected, to obtain and consider public opinion in the overall environmental assessment. If this course of action is not taken, it can only be assumed that the Department of Interior is not interested in public views and does not wish to expose itself to opposing elements.

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There appears to be a tendency in each proposal to propose withdrawal and classification of land areas vastly exceeding that necessary to protect the features and qualities which prompted the action. An example of this tendency is the proposed Kobuk Valley National Monument where the Department has seen fit to recommend the withdrawal of 3,000 square miles to protect 30 square miles of sand dunes.

The Draft Statements uniformly fail to justify the need for the classification, boundaries and size of the proposals, although most of the reports imply that controls and regulations are needed for even an expanded area which would extend beyond the boundaries of a given withdrawal to avoid significant impacts on the area withdrawn. To justify these extraterritorial areas of cooperative management, the Department of Interior has created the term "Area of Ecological Concern", although no basis can be found in Section 17 (d) (2) of the Alaska Native Claim Settlement Act authorizing such a land classification.

The concept of an "Area of Ecological Concern" established in conjunction with a national park or a wildlife refuge is in theory quite commendable, and represents an innovative step on the part of the Department of Interior. As has been stated many times in the (d) (2) environmental impact statements, the arbitrarily drawn straight boundary lines which encompass parks, refuges, etc. many times do not provide an effective management area for the protection of ecological features. The (d) (2) proposals indicate that in theory the Areas of Ecological Concern would be administered by cooperative agreements between the managing agency of the federal withdrawal and the adjacent landowners within the Area of Ecological Concern. This can be an effective and important management tool for the protection of these areas as long as the affected land owners are considered and treated as an equal partner in the relationship. Equal partnership, however, means that the Department must be as willing to let its neighbors know and affect what it proposes to do inside of the federal withdrawal as the neighbors in turn must be willing to comply with federal requests and restrictions.

A factor not adequately addressed in any of these proposals and which makes it imperative that a single draft environmental statement for the entire 83 million acres be prepared concerns the cost to the American taxpayer for administering

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the regulations, restrictions and management systems which will be imposed if these areas are designated by Congress as additions to the "Four Systems." At the present time, all four of the management agencies in question, i.e., the National Park Service, the National Forest Service, the Bureau of Sport Fisheries and Wildlife, and the Bureau of Land Management are all understaffed and underfunded in fulfilling their responsibilities in Alaska. It is only with extreme difficulty that these agencies presently operate within the State, and it will require radically expanded staffs and funding in order to adequately administer the new areas. It is incumbent upon the Department of Interior to prepare a fiscal note as a part of the Draft Environmental Impact process which adequately addresses the benefit/cost ratios of these proposals and an indication of the sources of funding for each.

In these times of national energy shortages, careful scrutiny should be given to the manner in which the author agencies have consistently and glibly passed over potential sources of fossil fuels, geothermal and hydroelectric energy. The Alaska Power Administration has indicated that potential hydroelectric sites occur in 20 of the proposals, potential geothermal sites in 9 of the proposals and potential petroleum reserves are in 19 of the proposals. As the Nation's requirements for fuels having low pollution characteristics become greater, and are mandated by law in the future, it is more and more important that adequate provision be given to the inventorying and development of these potential energy sites. If the potential of these areas is not adequately developed, it will become increasingly necessary to substitute other energy sources with high pollution characteristics in the very areas of the nation where improvement is most required. One of the major shortcomings in the approach to preparing these Draft Environmental Impact Statements is the failure to consider on a regional or statewide basis, the significance and importance of the untapped energy potential in these withdrawn areas.

Of great concern to the State of Alaska is the withdrawal of millions of acres of tide and submerged lands belonging to the State under the Submerged Lands Act and the Statehood Act and similarly, the designation of other tide lands and navigable waters as Areas of Ecological Concern. This raises the serious question of preemption of the right of the State of Alaska with respect to these lands and navigable waters, and in some instances can be considered as expropriation of State property.

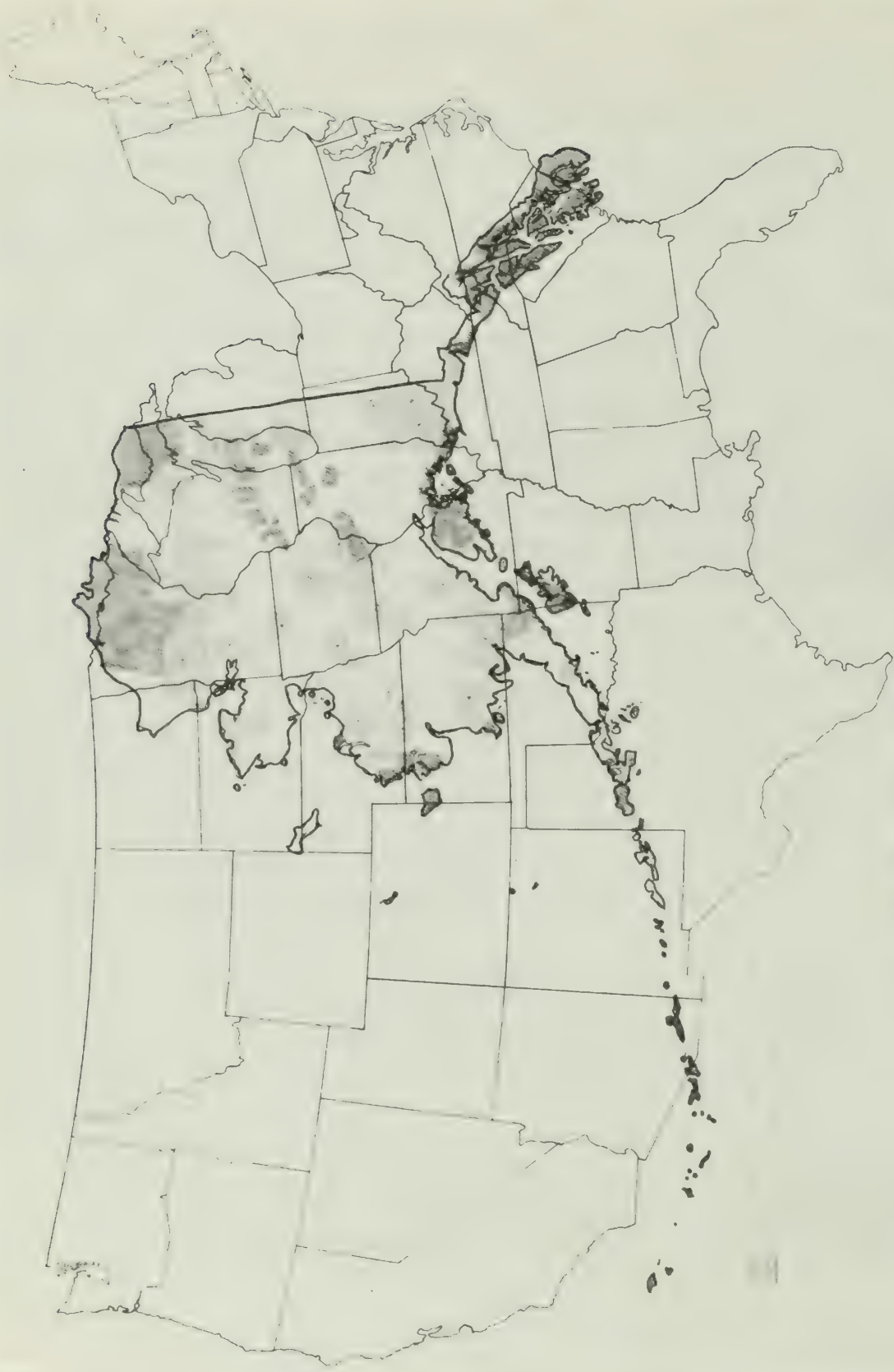
The apparent jealousies, and lack of confidence and trust among the various federal agencies is made abundantly clear in the analysis of these documents. The advocative inference that only through a particular agency's management system can the national interests in a particular proposal be truly protected does little to instill confidence in the federal management system.

Although it is to be expected that an individual agency would lobby within the Draft Environment Impact Statements for the establishment of its particular management system, this advocacy has unfortunately been allowed to color their analysis of information and throws serious question as to the validity of their conclusions and recommendations. The draft statements are replete with incorrect, biased and misinterpreted information. Agencies have suppressed information which disagreed with their predetermined positions, and have resorted to the use of emotional cliches and outright distortion of facts in an apparent attempt to display their environmental fervor.

The lack of knowledge of the agencies with respect to the subject of subsistence is appalling and appears to ignore the fact that the Native people of Alaska have survived for literally thousands of years in a hostile environment only because they practiced the type of sustained yield management that is the ultimate objective of conservation. Surely the imposition of bureaucratic federal regulatory measures on this exemplary balance of man and his environment is unwarranted, unjustified and unsupported by any factual information contained in the draft statements.

The fold-out map following this overview is an accurate scale representation of the State of Alaska superimposed on a map of the coterminous states drawn to the same scale (1 inch = 135 miles). The proposals, as outlined in the draft statements, will dramatically affect land use, transportation, subsistence, communications, recreation and other factors that relate directly to the quality of life and the viability of Alaska as a sovereign state. It is felt that only by portraying graphically the existing federal withdrawals and their geographic relationship to the proposed additions to the "four systems" can the true impact of the size and importance of these proposals be fully understood.

The State of Alaska is gravely concerned that nothing in these draft statements addresses the goals and objectives of the Alaska Native Claims Settlement Act which is, after all, the vehicle by which these "National Interest Lands" are being evaluated for possible inclusion in the Four Systems. In a number of cases, the constraints that are proposed for these (d) (2) lands and the impact of those constraints on other lands in a region will cause traumatic disruption of travel, access, hunting and subsistence patterns that have existed for time immemorial. The land grant provisions within both the Alaska Statehood Act and the Alaska Native Claims Settlement Act were intended by the Congress to assist in the development of a viable economic base for the people and the government of Alaska. If the proposals for these (d) (2) lands effectively prohibit the Native peoples from beneficially enjoying the lands granted to them under the Claims Settlement Act, the will of the Congress of the United States in adopting this landmark piece of legislation will have been thwarted.



PROPOSED FEDERAL WITHDRAWALS
STATE OF ALASKA

MOUNT MCKINLEY NATIONAL PARK

MOUNT MCKINLEY NATIONAL PARK

General Comments

A much more carefully documented, researched and written environmental impact statement is needed to fulfill the requirements of the National Environmental Protection Act. This one is lacking in qualitative and quantitative information, definition of terms and clarification of issues. Statements concerning the condition and welfare of various resources are scattered throughout the report. In some cases, the information is out-of-date, inaccurate, incorrectly interpreted and, in many cases, lacking.

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There is no biological evidence presented in this statement to support the claim that the northern extension is necessary for the integrity and well-being of what is referred to as the "large mammal ecosystem." Traditional sport and subsistence utilization of wildlife in the areas proposed to be added to the present McKinley Park is largely overlooked. The decision to prohibit these uses in this or any park extensions must be completely evaluated.

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The chief rationale for extending the park boundary is to provide protection for habitat and wildlife in the area. The assumption is made that habitat degradation could occur through poor regulation of developmental projects such as roads, mining, etc. This assumption is correct. A second assumption made in this statement is that hunting will upset the existing predator-prey relationships and normal population dynamics of large mammal species that move in and out of the present park. It is assumed that contemporary relationships among wildlife species in the park represent the undisturbed "balance of nature" to be found where man is not a factor.

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These latter two assumptions appear poorly founded in fact. Hunting of moose, caribou, wolves and bears adjacent to the park's north boundary has occurred since the boundary was established. Because this hunting has persisted for a number of years, it undoubtedly has had some impact on park wildlife that moves in and out of the park. Therefore, the assumption that ecological relationships as they now exist in the park represent, or are part of, an undisturbed

system, must be false. The only alternative is that the large animals involved do not leave the park, which in most cases is demonstrably incorrect.

There may be a need to restrict consumptive use activities of game in areas adjacent to the park, when these activities affect the behavior or the populations of animals in the park. Our point is, there is no need to restrict all use in all areas to achieve the same result. Habitat integrity can be accomplished without excluding subsistence uses, sport hunting and travel through the area, although certain of these uses may need to be regulated.

The National Park Service has proposed a Cooperative Planning and Management Zone to the south and east of the proposed park. The State is not totally opposed to such an idea. However, because much of the land belongs or will belong to the State and private individuals, they should have the lead in the planning and management processes.

This concept could also be meaningfully applied in place of the northern addition. A "Cooperative Management Zone," including state land along the north boundary, could be established to provide for habitat protection and closer regulation of hunting, timber cutting and other uses, but would not necessarily eliminate these uses. If protection (including possibly improvement or manipulation) of wildlife habitat were the foremost objective, other permitted uses would be regulated to conform to the needs of this objective. With few additional restrictions, the present habitat and wildlife could be maintained and probably enhanced without eliminating all but park use.

The maintenance of substantial and diverse wildlife in and near Mt. McKinley National Park is a valid concern of both the federal and state governments for esthetic and economic reasons, but it seems clear that this and associated concerns can be better met through a more innovative approach, such as a "Cooperative Management Zone." This alternative must be fully evaluated in the final draft environmental impact statement for this proposal.

In studying the possibility of creating a northern "Cooperative Planning and Management Zone," two major considerations should be: assessment of mineral potential in the area, with either strong regulations for habitat protection during

development or closure to mining (if prospects are very poor); objective assessment of the need for roads in the general area, with either elimination of road plans or rerouting to reduce the possibility of serious conflicts with wildlife habitat values; and identification and protection of critical wildlife habitat areas.

The south McKinley addition could be an asset to the Denali State Park as it could serve as a means to preserve the foreground view of the mountain. Denali State Park may logically contain the heavy development and therefore preclude intensive development in the generally unsuitable area of the proposed south addition. This would allow an opportunity for visitor activities among the unusual glacier fields but retain the economic development potential in the State park area and along the existing highway. However, there is some concern that the expansion would curtail possibilities for private development, in addition to encroaching upon potential agricultural lands.

The entire impact statement ignores the fact that management of the State's wildlife populations, with certain exceptions, is solely the prerogative and responsibility of the State of Alaska. Nowhere in the statement is there any example given that present State wildlife management practices are or soon will be inadequate or why the Park Service should assume this responsibility. There is much concern with "protecting" resources, but a failure to identify existing problems or threats to the resources.

The proposal carries much more impact than mere additions; it also proposes closure of the existing and proposed additions to subsurface resource utilization (minerals) over a single area totaling 5,149,493 acres. It should be remembered that mining has a historically significant role in the Park; the Act creating the Park (39 Stat. 938) affirms the rights of residents of the United States to mine in the Park, with certain regulations.

The proposal avoids consideration of the potential for mineral development. The presentation also fails to indicate probable zones of mineralization and does not mention the considerable indicated potential of the Mt. Eielson vicinity.

The national interest would seem to demand a thorough investigation of mineral potential before either eliminating mining in the existing or the proposed extension.

Besides, orderly development can leave more than 99 percent of the area unimpaired.

The environmental impact statement needs some strengthening in the discussion of increased visitor use and transportation. Assuming that the Proposal is correct in its implication that there will be increased visitation, the description and analysis of the impact on transportation is thoroughly deficient. This is particularly true with respect to demands on surface transportation, but is also true on all aspects of air transportation. This includes the effects on airports both within the area and as far away as Anchorage and Fairbanks; impacts on certificated air carriers; impacts on other commercial, private, and military operators; impacts on existing and future air routes across and around the area; and impacts on air navigation and safety.

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Considering the Bus vs. Private Auto Transportation System, several pertinent facts are missing. What happens when bus traffic increases to the levels of prior private auto usage? What happens if every Park visitor wants to go to Kantishna? If the Park environment is greatly influenced by the transportation system, a detailed report of the system and related impacts is mandatory to this environmental impact statement.

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The State is also concerned that the rights-of-way that have been granted to the State over the years not be ignored by the Federal government. Since the proposal refers to the increased visitor demand on Talkeetna, Healy, Nenana and other of the area's villages, it seems that a greater assessment of the impacts on these communities should be part of this impact statement. Just who will take care of the increase in tourism and how will it be done?

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MOUNT MCKINLEY NATIONAL PARK

Specific Comments

- Page 2 The readability and understanding of Table 1 is unclear. Although the title is "Land Status of Proposed Additions (in Acres)", the meaning is millions of acres, a significant difference. Table 1 lists additions for both the north and south additions as 1.6 million acres each. The following paragraphs, however, list 1.7 million acres each. 17
- The definition of "ecologically manageable boundaries" should be included. The statement that 1.7 million acres are needed for the "perpetuation of the indigenous large mammal ecosystem", is an indefinite argument that could be used for any number of acres. The "large mammal ecosystem" could include a list of the species and the needs of the various mammals with regard to range size and habitat. 18
- Page 3 Toklat River is misspelled as "Toglat" on this and all subsequent maps. In addition, the Nenana River, an important drainage on the eastern side of the Park, is not labeled on any of the maps. 19
- Page 5 (Paragraph 1) The southern addition is to provide the National Park Service protection to that portion of the Alaska Range, however, the Park Service cannot "protect" its present boundaries. Perhaps a better word would be to provide the National Park Service with the "jurisdiction." The southern addition to provide "visitor access to the park that avoids disturbance of the critical wildlife areas to the north" should be clarified. 20
- (Paragraph 2) In addition to the Kantishna area which has had mineral production in the past, some mention should be made about the Slippery Creek area which also had mineral production. 21
- (Paragraph 3) The statement, "Subsistence uses are not definitely known to occur within the proposed additions," is not true. There is a substantial amount of subsistence hunting and trapping in the proposed additions. Most operations are based in Minchumina, Kantishna and Telida. 22
- Page 6 This section explains the objectives of a proposed "Cooperative Planning and Management Zone". The establishment of the "zone" is designed to take all of the development, mineral industry, recreational facilities, etc. that would be lost to the management objectives of the park extension. No environmental analysis information is included. It is disturbing to have the NPS attempt to extend their land management influence outside their proposal before they have established either the need for their own proposal or the impacts of their land management proposal. There is no data to support the assumption that the "co-op zone" would be better for mineral industry development than parklands. The impacts associated with forcing the economic development into a region around the park would be significant and should be identified. Lands which would 23

support mineral development are not only outside the proposed extension. An inventory or at least an assessment of the potential should be prepared by the Bureau of Mines or other resource authority for inclusion into this Statement.

Page 8 (Paragraph 3) "Large mammal ecosystems" are non-existent.

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The NPS is avoiding the issue of environmental impact analysis. The statement "it is necessary to delay the ...development of detailed plans for construction, transportation, or other matters until the completion of extensive investigations of the values to be preserved...", is circumvention of the very intent of an environmental impact statement. Impacts from development "...of construction, transportation", etc., should be identified at least on a cause and effect basis and explored. Where specific data is lacking, comparative information could be interpolated. Omitting this type of information does not allow the reviewer to evaluate the impacts.

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Page 9 This page graphically depicts the location of "general development". It further identifies developed areas as, highways, interpretive corridor, campgrounds, ranger and maintenance stations, private airport and air tours. If the text would identify the impacts of these specific developments based on present and projected use levels, a meaningful part of the E.I.S. would be accomplished.

Page 11 (Paragraph 2) Historic places usually indicate the past presence of the human animal, further showing the need of habitat by people as part of the "natural" environment. Some correlation between the historical resources and the proposal is needed.

Page 16 (Paragraph 3) Areas of ecological concern outside the proposed additions include State selections near Healy. The proposal states that "management programs applied to these lands must be compatible with park purposes to assure the continued health of this portion of the Mt. McKinley large mammal community." The Federal Government, apparently, proposes to impose its concept of compatibility on the State of Alaska lands.

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(Paragraph 2) The State knows of no critical moose calving area in this area and would appreciate the opportunity to review Park Service data regarding the area.

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Page 17 (Paragraph 4) The State of Alaska Departments of Fish and Game and Public Safety are responsible for game management and game law enforcement, not the National Park Service and the Bureau of Land Management.

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Page 18 The National Park Service states, "a very high degree of cooperation will be necessary with several agencies of the State of Alaska". This implicates these agencies as party to the proposal and necessitates their views be included in the Draft Statement.

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- Page 19 (Paragraph 5) No mention is made of wolverine or beaver as being major wildlife species of the area.
- Page 20 (Paragraph 3) Although Mt. McKinley Park provides an opportunity to observe wildlife, it is inconceivable that the NPS would assume that a visitor would "understand the natural forces which shaped this earth and the biological inter-relationships of which it is knit." This paragraph should be omitted.
- In the following paragraph, there is no basis for the conclusion that the proposal is necessary or even desirable as an "opportunity for baseline research of virtually undisturbed subarctic systems from which man can derive a means of understanding and predicting the consequences of human actions on other areas in the North."
- (Paragraph 5) The implied definition of ecosystem in the statement, "existing McKinley National Park provides an incomplete ecosystem" is presumptuous, and even if technically correct, is only indirectly related to "preservation of the integrity of scenic resources and geologic phenomena."
- Page 21 (Paragraph 2) Why is there no discussion of the ecological inadequacies which the proposal is to correct?
- Page 29 (Paragraph 2) The mileage reference to the "center of the park" is misleading. The reference is to the east boundary near park headquarters. The physical center of the park is quite a few miles west of park headquarters. The reference to man's influence on the large mammal predator-prey ecosystem is an important point. It should be definitely explained or at least referenced to another section of the E.I.S. for supporting data.
- Page 30 (Paragraph 2) The NPS says the existing Park's "boundary lines are predominately straight lines, and therefore do not follow drainage divides or contain antural ecosystems or wildlife ranges situated to provide manageable units." It must be assumed that the proposed additions correct all these things; however, the lines around the proposals are straight lines also. The NPS has taken virtually all of the available Federal land adjacent to the existing park and claimed it as "ecosystem", or "ecologically manageable boundaries." It is extremely hard to believe that ecological divisions predominantly follow township lines and include all the available lands.
- Pages 34 and 37 Visitor-use figures for the Park should be related to environmental impacts. The statistics by themselves are not helpful in analyzing the impact of the proposal. The figures also tend to be misleading in terms of actual use of the Park.
- Page 38 Measuring Park fishery resources by "Alaskan standards" is not the best way to represent the information. Any out-of-state reviewer then is forced to make an assumption on what the possible standards are.
- (Paragraph 3) The NPS does not seem to realize that there are presently "land use patterns," which include subsistence, mining, recreation and non-use.

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Page 39	The NPS concludes that some lands outside the existing Park have no potential for "readily discernable resource developments." This type of conclusion needs support. The Alaska Rural Development Council's publication <u>Alaska's Agricultural Potential</u> contains contradictory information. The authors of the agricultural publication have indicated both lowlands and uplands suitable for farming in the proposed north extension. Also within the north addition are recognized renewable resource potentials for forest resources. Further, the Agricultural authorities have determined a potential for grazing and pasture in the north addition. The Mineral Industry Research Laboratory has indicated high mineral potential lands both within the proposed additions to Mt. McKinley Park and within the existing Park.	37
Page 40	Such statements as, "Uncontrolled and unrestricted commercial, residential, and recreational strip development is taking place along the Anchorage-Fairbanks Highway and to a lesser degree along the Denali Highway," are completely unsupported. No mention is made of existing regulations or controls. No attempt is made to qualify the "uncontrolled, unrestricted" development.	38
Page 43	The NPS owes an explanation of what they really mean by this sentence, "The Ingalik people of the McGrath area and the Tanana Indians around Nenana and Healy are of concern in this area."	39
Pages 44 and 46	Perhaps the Native residents of Cantwell would offer an opinion for inclusion in the E.I.S. concerning their use of the lands. The following quotations contradict the statements on page 5 about subsistence: "Both Native and non-Native residents of Cantwell use the game resources of the foothills of the Alaska Range." (p. 44) "Most non-Natives engage in subsistence use of the fish and animal resources of the surrounding areas." (p. 46) Some correlation between sections of the E.I.S. is necessary to keep out contradictory statements.	40
Page 46	Table 1 appears to refer to Table 2, page 45.	41
Page 48	(Paragraph 1) The last sentence is contrary to fact. It has been a number of years since Nenana has been considered as a starting point for expansion of the State Highway System to the west or to the north. However, Nenana still is a prime choice as a starting point for extension of rail transportation to the west or the north.	42
Page 49	<u>Subsistence Income</u> : The entire section is defined on the basis of Natives only. Subsistence utilization must be expanded to include all ethnic groups.	43

- Page 53 (Paragraph 4) The statement that no subsistence use is known to have occurred within the proposed area in recent decades is untrue. The proposed area abuts the Telida village withdrawal where trapping and hunting have been carried on regularly to the present day, and the people are substantially dependent on the land for food. It is true the pattern has changed, but it's still a subsistence life style. Also, trapping in Minchumina is still being done by some people, e.g. Tom and Mary Flood, who trap every year on the Muddy River for beaver, marten and other furbearers, and obtain a substantial part of their livelihood from trapping. **44**
- Page 54 (Paragraph 6) The NPS should consult with the Alaska Department of Fish and Game which has some knowledge of the existing amount and location of subsistence trapping activity in the area. The same is true of the cash income section on page 55 where no mention is made of the income derived from fur resources in the area. **45**
- Page 57 USGS Geological Bulletin 1246, Metalliferous Lode Deposits of Alaska, shows a claim pattern which agrees well with the map. C.C. Hawley also indicates the central northeasterly trend as important.
- Page 61 The statement of land use by guides shows an existing commercial land use and possibly a subsistence use. This is contradictory to NPS conclusion. **46**
- Page 63 (Paragraph 3) The entire area is an important and established recreation area, not just the park areas. **47**
- Page 66 (Paragraph 4) Although the Mt. McKinley National Park is abundant in scenery, wildlife, mountains, glaciers and wildflowers, the proposal never deals with those factors that control the growth of tourism: overnight accommodations, development of natural and historical sites and improvement in transportation network. The proposal will do little but hinder the remedy for the main noted deterrants--seasonality, lack of accessibility, overcrowding, and lack of accommodation. The policy of excluding access and industrial remedies for seasonality will also place more pressure for overcrowding in those areas where access is still available.
- Page 73 The NPS concluded that because of adverse weather many visitors are not able to view Mt. McKinley. The result is that they go away disappointed. Here the NPS has pointed out a Park management goal. Looking at a mountain has little adverse effect on the mountain. Although the NPS mentions a plan to construct facilities nearer the mountain for visitors, analysis of the impacts of various methods of moving people closer to the mountain might be explored in the E.I.S. **48**
- This page is full of misinformation and is poorly written. It should be rewritten.

Page 82	(Paragraph 2) There is, however, inferred potential for development of petroleum reserves.	] 49
	The State considers 945,000 acres of the proposed area to hold potential for 38 million bbl. of oil and 277 million cu. ft. of gas.	
	Coal potential is discounted by comparing it to the total of all Alaskan potential, although the potential of this area has great short-term emergency value owing to relatively easy access as compared to much of the coal included in the estimated reserves total.	
Page 86	(Paragraph 3) Black spruce communities exist, with proper soil conditions, east of Wonder Lake and above 2,500 feet.	] 50
Page 89	(Paragraph 1) Although lichens may be the principal constituent of the caribou's winter diet, there is some indication that dwarf shrubs and sedges may also be an important part of the diet.	] 51
Page 91	This graphic representation of the caribou concentrations and calving areas show the need for management far beyond the boundaries of the proposed Park extensions. The management authority is presently the Alaska Department of Fish and Game. Before the NPS uses the condition and control of this resource as a justification for extending the Park, they should demonstrate that they are better qualified to manage the big game resources. This report does not make either a specific charge against management by the Alaska Department of Fish & Game or display a "better" management proposal by the NPS. Since this map shows that the vast majority of the range and calving areas are outside the existing Park, perhaps the conclusion should be made that the Alaska Department of Fish & Game should be given management authority in the Park as well as outside it.	] 52
Page 94	(Paragraph 2) It is noted that total number of sheep in Mt. McKinley Park are unknown, but Murie reported sheep numbers in excess of 10,000 within the Park at one time. Haber (page 94, E.I.S.) estimates 1,100 sheep in the existing Park now. It would appear that complete protection from hunting has done little to improve numbers of sheep within the Park since 1917. Perhaps it was not designed to, but the implication of "protection" is improvement in the numbers of a species, when in actuality, it seldom proves to be the case. While certain integral biotic communities should be protected, if for no other reason than to use as a base to see what happens under no influence by man, the State cannot agree that a million and one-half acres is not sufficient to accomplish that purpose.	] 53
	(Paragraph 3) Although ponds and lakes which produce aquatic vegetation do support moose populations, it should be stated that aquatic vegetation is important only during the months of May to September. With respect to the moose density of Sunflower Basin, Mr. Sanchez should be identified and listed in the reference section. The State would be interested in knowing how the figure of one moose per square mile was derived, and why. The only moose survey in the basin known to the Alaska Department of Fish & Game was conducted by the Department in October, 1973.	] 54

Fish & Game personnel counted nearly 500 moose in Sunflower Basin and surrounding drainages under poor to fair counting conditions during the 1973 survey. The maps of the area covered and data gathered are available in the Anchorage Region, Alaska Department of Fish and Game offices. Sunflower Basin is an important moose wintering area. The Alaska Department of Fish and Game has documented moose winter kills in various portions of the area (Unit 16) in past years. At one time, an emergency moose hunting season was promulgated to allow use of animals which were obviously going to succumb to a harsh winter.

Also, how can the Park Service estimate the size of the moose herd if a detailed census of the moose population in the Savage River area has never been conducted?

If the north and south additions are added to the existing park, including the large areas of moose habitat which Park personnel now acknowledge exists, management of all game species, including moose, will cease to exist. Under the "no hunting" and "game refuge" ethic established by Congress in creating Mt. McKinley Park in 1917, all animals in the proposed extension, including moose, are destined to starve to death or die of old age, barring predation or accident.

Data accumulated from studies the world over (examples: Yellowstone elk, Kaibab Plateau deer) indicate that large ungulate populations are their own worst enemies. Left to increase on their own, ungulate populations reproduce rapidly, given good range conditions, and often reproduce in numbers beyond the capability of the range to support them. At that point, the population "crashes" leaving the range in very poor condition due to overbrowsing. An acknowledged condition of this area is low productivity of plant life (see page 89 of the E.I.S.) which would result in an extremely long period of plant life recovery with concurrent low ungulate populations. The thesis that a "refuge" provides "protection" for animals, particularly ungulates, is untenable in most areas of the world, with the extensions of Mt. McKinley Park among them. The term "management" is reduced to "protection from killing" and true management ceases to exist.

Page 99 (Paragraph 2) Snowshoe hares during years of peak abundance should also be mentioned as an important prey species for wolves. Moose, rather than caribou, are likely a more important source of food for wolves in the area today.

Page 100 (Paragraph 2) The statement that grizzlies in this portion of the State are for the most part vegetarians is too generalized. Bears in and outside the Park eat carrion and occasionally kill ungulates. On the lower Toklat it is known that grizzlies forage extensively for salmon carcasses in late fall. Grizzly bears emerge from dens from early April through mid-May, not just during early April.

(Paragraph 3) It is stated "in 1944 Murie estimated a population of 50 - 75 grizzlies between Park Headquarters and Wonder Lake." On page 123, is this same estimate made in 1944 used to state, "Fifty to

seventy-five individuals (bears) are estimated within and adjacent to the northeastern portion of the existing park?" The area is not even the same area mentioned on page 100.

Page 103 Define "prime natural resource."

Page 106 (Paragraph 1) The NPS states that the northern extension constitutes important nesting and rearing areas for migratory shorebirds and waterfowl. Consulting the publication Alaska Wildlife and Habitat shows that the proposed extension is only a fraction of the total area north and west of the existing park used by the avifauna. The NPS should demonstrate how their proposal would benefit these resources more than present land use management concepts do.

"Sandhill crane" should be "lesser Sandhill crane."

(Paragraph 2) The surfbird is not rare in Alaska. It is rare to the extent that not many nests are reported, but that is because they are difficult to locate.

(Paragraph 4) The proposal inaccurately states that "the only species of amphibian in Alaska, the wood frog, occurs in the park in marshland near Wonder Lake." Toads and salamanders, both amphibians, occur in Southeast Alaska. It should not be implied that the wood frog may not occur in the northern addition.

Page 107 (Paragraph 1) Red salmon (Oncorhynchus nerka) are also present in Chelatna Lake.

Page 108 (Paragraph 2) The sentence regarding natural selection should be rewritten. Natural selection is always efficient and operates not only in the winter but throughout the year.

Page 109 Permafrost is an interesting phenomena; however, its relationship to either land management philosophies or environmental impacts should be clearly established. As presented here, it is exteraneous information and not relevant.

Page 111 Newly published data contradicts the forest resource conclusion on this page. An attempt should be made to include the latest information.

Page 117 Here and in other sections, information from other publications has been quoted at length. Some summary of the information would be helpful; the entire text could be attached as an appendix.

Pages 120 and 121 The NPS presentation neglects to mention the mineral potential for on-going prospecting and mining at Kantishna in discussing its "Interpretive Potential." There is also an omission of historic recognition of the mineral potential of the park lands when it was established. See Section 4 and 5 (39 stat. 938, pp. 221,222). The recognition of the mineral nature of the area by Congress is in itself a historic feature.

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Pages 121
and 122

This series of statements has a high degree of ambiguity. The second paragraph on page 121 states that failure of enactment could impede the growth of the tourist industry at fairly low levels. Elsewhere in the statement it is carefully pointed out that no substantial increase in visitor facilities is contemplated. Hence it is difficult to see how the gross acreage of a future Mt. McKinley National Park could seriously affect the capability of the park to accommodate visitors. It must be remembered that the stated Park Service objectives are to manage nearly all the proposed additions as wilderness wildlife habitat. Unless clear support can be developed the only honest statement along these lines is that enlargement of the park will have little if any effect upon the tourist industry.

68

The statement is made that improvement of the trail from Healy to Stampede would create increased pressure to upgrade and reopen the existing park road to private auto traffic. As the existing park road does not connect with Stampede it is difficult to accept the Park Service statement. We feel that the Park Service should be called upon to clarify the cause and effect relationship. Improving the Healy to Stampede right-of-way would seem to offer an alternate route to the Kantishna area, providing visitors with the opportunity to view Mt. McKinley from close quarters without increasing traffic on the Park road.

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Page 122

(Paragraph 2) This statement implies that the Alaska Department of Fish & Game is not capable of protecting the several wildlife species by means of their regulations.

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Page 122

(Paragraph 4) The suggestion that mineral development at Kantishna and Stampede could take place without interference and lead to air and stream pollution within the existing park seems to ignore the direction of drainage in the area and State environmental laws.

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(Paragraph 6) The discussion of "habitat for outranging species of mammals, "which we assume to be moose, caribou and wolves, is adequately represented in the existing park.

Page 123

The conclusions and assumptions in this section on wildlife impact are contradicted so many times within the Proposal that they are unusable for environmental impacts. Some of the information presented here is outside the Proposal. Graphics showing the range of the caribou contradict these figures. The present harvest figures are available and range conditions could be included.

72

(Paragraph 1) This paragraph is extremely poor and must be extensively rewritten. Wildlife populations in the proposed extensions already exist in an altered ecosystem. The second sentence is false. Hunting and trapping have already altered the carnivore - herbivore interrelationship. The third sentence needs clarification in terms of what is a significant disruption to populations and interrelationships. It also

conflicts with the first sentence. The fourth sentence should state for what species approximately 20 percent of the southern unit is considered habitable. We suggest the next sentence read sport populations are low, rather than fish populations are small. The last sentence should explain utilization of the salmon resource, however small this utilization by man may be.

(Paragraph 2) No mention is made of the source that claims there is one wolf per 50 to 60 square miles, and it should be clarified as to whether this density means in the northern addition or the addition plus the present park. The estimate of the herd size of 10,000 animals for the McKinley caribou herd is too high. Present herd size is likely one-fifth to one-tenth this number. Current caribou wintering and calving areas have not been identified for the McKinley herd by any reliable source. Also, we have no record of any concentrated calving grounds for moose at the northwest corner of the proposed area. The marten population discussed is indeed a "noteworthy population" and the discussion must be expanded to truly reflect the value of this resource.

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Page 124

(Paragraph 1) The first sentence should be rewritten to state that "hunting pressure for moose and grizzly bears is increasing within the northern additions." The next sentence should also be rewritten to say that significant hunting pressure on caribou has occurred in the Kantishna and Stampede areas adjacent to the present park boundaries. The third sentence is erroneous. Sunflower Basin as well as the Collinsville area and the Peters-Dutch Hills which are within the proposed southern extension receive good hunter pressure, particularly from hunters using light aircraft.

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Page 124

(Paragraph 2) There is no documented evidence that animal populations that are subjected to hunting exhibit changes in genetic makeup. This is speculation stated as fact! Furthermore, how could the stated light hunting pressure provide such a dramatic genetic change? The second sentence could read, "the enlarged Park will create large areas of mostly typical interior habitat," instead of "areas of prime habitat." The third sentence is again speculation that a maximum diversity of genetic makeup will occur in naturally self-regulating wildlife populations.

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Page 125

(Paragraph 1) Where are the critical ungulate calving areas located that are mentioned in the second sentence?

76

(Paragraph 2) Present visitor-caused impact to the existing park area can hardly be deemed minimal. The bear-human conflicts continue to occur, construction of the park road through Polychrome sheep habitat has occurred, and use of exotic grasses and sedges to stabilize road cuts is also occurring. In addition, the inability of the Park Service to curtail illegal hunting and theft of raptors from the existing park has been adequately demonstrated.

77

(Paragraph 3) There is far too little known about most of the areas's flora and fauna at this point to assure perpetuation of "regional populations." We wholeheartedly concur with the necessity to protect the wildlife habitat in areas adjacent to the existing park.

Page 126	(Paragraph 1) The long-lasting effects of disturbances should be clarified to include what type of disturbances are involved, and how long they last.	78
	(Paragraph 2) Statements like "within the proposed additions a few trees are used each year for cabin logs and fuel. If these lands are added to the Park such uses will be precluded", are of little value. What is the capacity for renewable forest resources? Some forest resource agency could provide this input.	79
	With regard to vegetation disruption by mining, how many acres are involved? Quantification of such impacts is necessary.	80
Pages 127 to 129	The discussion persistently omits the mention of the mining locations within the park.	81
Page 127	(Paragraph 2) The treatment of the Kantishna hostel and other disturbances are unrealistic. Aesthetic impacts must relate to each viewer. To say that because something is not natural it is unaesthetic is purely opinion. Mention should also be made of Camp Denali as presenting visible remnants of the works of man.	82
	(Paragraph 3) Does "moderate non-recreational visitation" mean mining?	83
Page 128	(Paragraph 3) Is there any evidence in Alaska that heavy snowmobile use will compact snow enough to cause visible scars? What was the source of this information?	84
	The discussion of the impact on transportation is biased. The first paragraph, which describes existing facilities, identifies the Lignite-Stampede pioneer access road as an existing facility. The mention of it in the second paragraph as a winter trail ignores for one reason or another the fact that this road is a State Highway and located on a valid and existing right-of-way. Their discussion of the impact of the proposal upon the transportation corridor between Rex and McGrath is also biased. The probability that nearly all the north addition would be established as a wilderness would forever preclude the construction of any transportation facilities within the addition. The generally inferior soils and worse permafrost conditions north of the proposed addition could increase road building costs tremendously were the State precluded from utilizing the corridor which it has identified. The glib statement that implementation of the park expansion would not significantly compromise regional transportation needs is at best a blatant disregard of the State's responsibility to meet the future needs of its people. The lack of an attempt to evaluate the impact of foreclosing to the people of Alaska the establishment of surface transportation between the Fairbanks area and the Upper Kuskokwim Valley makes it questionable whether this environmental statement has met NEPA requirements.	85

The discussion also ignores the current use of small aircraft to land climbing expeditions at the south edge of the existing park boundary. If implicit in the proposed south addition is the denial of this practice, expedition climbing in the Mt. McKinley massif is essentially finished. This is because the approach effort by surface means would be so time consuming that many climbing parties could not afford this expenditure of time and effort.

86

Page 140

Expanding the overall size of the Park will not, as implied, necessarily result in increased visitation to the Park. Practically all current visitation is via road. Since increasing the road system through the Park is not anticipated, it is doubtful if there would be any significant increase in visitation beyond the present annual increases. If new roads were opened into new areas of the Park it is felt that visitation would increase and more visitors would have a better opportunity to view the Park. Although the Park Service anticipates a continuing increase in visitor demand it is looking toward the State and others to meet this demand. This appears to be one of the purposes of establishing the Cooperative Planning and Management Zone. This means that the Park Service purposes to attract more visitors into the Mt. McKinley area but will depend upon others to provide the necessary tourist services.

87

It is our feeling that if the Park Service is sincere in their belief that enlargement of the park will, in fact, encourage greater visitation, they must address fully the problems caused by these additional visitors. In other words, the Park Service must develop on at least an order of magnitude basis, the impact upon the State, other Federal, and private interests caused by the demands which would be triggered by implementation of the Park Service proposed action.

(Paragraph 3) The State does not believe sightseeing, wildlife viewing, and nature study rank ahead of fishing and sport hunting as far as recreational activities in the area. This appears to be an arbitrary and subjective ranking, and fails to consider the heavy sport hunting activity occurring in the area in the past several years. Data must be used to substantiate this allegation.

88

Page 142

(Paragraph 2) The admission that Park Service control of the proposed Cooperative Planning and Management Zone might conceivably have a negative impact on some investors illustrates the naive approach in accommodating the public. If their dictates have a negative effect there will be no investors.

Page 143

(Paragraph 2) There is a deliberate effort to draw attention away from the central mineralized zone to the Kantishna district. The record of declining mineral industry activity is more closely related to economic climate than to potential for mineral resources.

The persistence of effort to explore and develop the remote properties of the Mt. McKinley vicinity is a measure of the potential. The impact

on the national, State and regional economies of closure of this vast area to mining would be far from insubstantial. The whole area of the proposal is geologically favorable for mineral resources.

Page 144

Real potential can be demonstrated only through persistent exploratory effort. This factor of mineral supply is among the dangers of wholesale withdrawals of potentially productive land areas.

(Paragraph 3) Near the bottom, it is stated that the overall mineral potential of the area to the south is estimated at \$360 million dollars. We would be interested in knowing the source of the NPS appraisal of the mineral value of this area. It is contradicted by a U.S. Bureau of Mines report of June, 1973 which gives this area a potential mineral value of \$544 million dollars and a potential net benefit to Federal and State economies (multiplier effect) of \$1,360,000,000. (Only a portion of this mineralized area is within the proposed park boundary.)

Perhaps the figures for overall resources potential of the "area to the south" may relate to real estate value if the land were available for purchase. Three hundred-sixty million dollars could be produced from one square mile of the area within 60 years. Under favorable economic conditions and realistic land management it is probable that several areas each producing \$60,000 annually could be in production within 30 years. This value would not be immediately available under any form of management, but could become available within 10 to 30 years. The central mineralized zone extending from the Purkeypile area through Mt. Eielson has geological characteristics which indicate equal or better mineral endowment.

The Interior Department should show some consistency between documents issued by two of its agencies within a year of each other. A more searching examination of the mineral potential in the south addition is warranted before intelligent decisions can be made regarding implementation of the proposal.

Page 145

(Paragraph 2) No positive evidence is produced that coal does not underlie the area west of the Nenana River and within the proposal area.

There is repetition of the referral of estimated coal reserves to the total estimated statewide reserves. The comparison does not justify the conclusion of minimal impact. Firstly, these are accessible coal beds. There is production and transportation equipment operating and available in the immediate area and, secondly, the imposition of restrictive land management status to each 0.1 percent of the total reserve area would still result in no development of coal resources.

(Paragraph 3) The State disagrees with this estimation of the petroleum potential.

The Cooperative Planning and Management Zone cannot be adequately described as a mitigation measure.

Page 151	(Paragraph 4) The "light" use by Natives from Cantwell and Lake Minchumina for subsistence hunting purposes fails to recognize that hunting is an extremely important part of these cultures historically. The effects of relocating Native hunting areas will probably be significant, rather than insignificant as stated. This relocation will remove the option Native peoples have to make use of the land in the way traditional with their culture.	92
Page 152	(Paragraph 1) The statement that none of the proposed area is heavily utilized for hunting is false. Current use the past several years of the Stampede area and Kantishna areas for moose and grizzly bear hunting is heavy.	93
	(Paragraph 3) The socioeconomic impact of restricting areas of known mineral potential within a sparsely prospected area is not recognized in this discussion. Mineral raw materials producing capability shortages are rapidly becoming evident. The three zones represented within the proposal area can become exceptionally important, owing to proximity to developed surface transportation facilities.	
Page 152	Under "Unavoidable Adverse Impacts" several topics should be added: 1. Effects from non-reversible land management policy; 2. Restricted access to numbers of visitors when growth rates are projected in the future; 3. Costs of administering this proposal; and 4. Need for tax support for this proposal forever.	
Page 153	(Paragraph 1) Define "long term natural productivity." There is no evidence that the preclusion of human manipulation of resources could increase the biological productivity of the area. The authors demonstrate their lack of understanding of the concepts of game management and biological productivity on this page. It should be rewritten. Park status is not needed to protect either adjacent or existing park areas. Adjacent areas only need special management.	94
	(Paragraph 4) The statement "The area, acting as a protecting reservoir of native wildlife, will provide continued wildlife production, thus providing for better hunting, trapping, and subsistence use over the long run within the greater region," should be supported fully or deleted.	95
Page 155	(Paragraph 2) No mention is made of possible wilderness classification of portions or all of the existing park and proposed additions, and yet this proposal identifies controlled burning as one management tool to "maintain biotic diversity." Wilderness classification would preclude use of this tool under the Wilderness Act of 1964. What is the real difference between "controlled burning" and "controlled hunting" as management tools?	96
	(Paragraph 3) This paragraph should be clarified by mentioning how hunting and trapping would be affected and the effects should be discussed.	97

Page 156

(Paragraph 2) The proposals are summarized as follows "the proposed action is a policy decision favoring preservation of the natural environment." Nowhere have they shown that the proposed action is reasonably necessary to protect the environment, and that all other viable proposals would fail to do so.

NEPA requires a complete, straight-forward evaluation of the no-action alternative. In this case it would be incumbent upon the Park Service to state, in effect, that retention of the status quo, while it might have certain adverse environmental effects, would permit continued management of such mineral resources as do exist so that they may be extracted and contribute to the economy of both Alaska and the U.S.; would permit construction of a surface transportation link from the Fairbanks area to the Upper Kuskokwim Valley in an environmentally acceptable manner with benefits to both these areas; and permit recreational and tourist oriented developments within the area to meet whatever demands might develop.

98

Page 157
to 212

Alternatives to the Proposed Action: This discusses at great length a wide range of "alternative actions" which would be little more than boundary adjustments. Interestingly, out of the fourteen alternatives considered, ten propose to add more land than the proposal's 3.2 - 3.3 million acres. Only four propose smaller additions.

Page 157

(Paragraph 2) Trapping is omitted as a current use of the area.

99

Page 158

(Paragraph 1) Include a discussion of what natural environmental effects would be inversely related to economic environmental effects.

100

(Paragraph 3) How important is the moose calving area? How many moose use the area each year? How many calves are produced? What is the survival rate of calves in the area? Park status is not needed to protect the calving area. Special management, not park status, is necessary to protect the calving area itself. This may involve habitat manipulation. The area needs special zoning and management. If identified, the area could be withdrawn by the Alaska Legislature as a critical habitat area for wildlife managed by the Alaska Department of Fish and Game.

101

Page 164

(Paragraph 3) The grizzly bear was omitted from the list of animals of the ecosystem.

102

Page 169

(Paragraph 1) The first sentence states that the survival chances of these mammals could be lessened as a result of increased hunting, etc. The implication is that the Park Service can guarantee continuation of these species and their habitats. This is, of course, not so. For instance, the trees in the San Bernadino Forest are dying from the smog generated in Los Angeles.

103

Page 169 (Paragraph 2) This section describes a number of adverse effects were the north extension not to be implemented and the Alaska Department of Highways allowed to construct the Rex-McGrath highway. Rather than a blanket condemnation of highway construction as being detrimental to formerly unaltered landscapes and wildlife, and constituting a source of air and noise pollution, it would be incumbent upon the Park Service to make a truly objective analysis of the adverse effects of this particular highway. Ideally they should identify specific adverse environmental effects as well as those effects which may be beneficial. Among the latter would be the benefits accruing to various land management activities from the better access into and through the area. At no time did the Park Service ever contact the Department of Highways to ascertain any details regarding the proposed transportation corridor, the design and construction standards which might be used, or the traffic levels which might be expected.

104

Page 170 Although not mentioned, Alternative B-4 (excluding the south addition) would permit continued air transportation and supply of climbing expeditions in the McKinley massif.

Page 170 (Paragraph 3) Is this "extremely critical range of wolves" so critical that wolves will disappear if the area is not put into park status?

105

Page 175 (Paragraph 1) It is doubtful that continued hunting and trapping (not mentioned) of wolves in the area could eliminate the packs as stated. Wolves, like any other biological organism, produce a harvestable surplus. Harvesting the surplus cannot endanger the population. Does the Park Service have any data to indicate that the population of any species of game in the park has declined as a result of hunting along existing park boundaries?

106

(Paragraph 2) It is mentioned that the State currently recognizes the wolf packs as the dominant resource in the area. Neither the Alaska Department of Fish and Game nor the State government as a whole has made this policy. How is this statement documented?

Page 176 The moose calving area is again discussed and the fact that it has to be protected to preserve it. Evidence from the Matanuska Valley and the Tanana Flats indicates that development and intrusion by man has occurred in both these critical calving areas with minimal detrimental effects on calving success. Although there are areas that appear to be favored for calving, moose can calve nearly anywhere. It is inconceivable how hunting would hurt calving areas at all.

Page 182 (Paragraph 2) The Sunflower Basin area was a heavily hunted moose area in the fall of 1973.

(Paragraph 3) Again, red salmon are present in Chelatna Lake. Whitefish are not only found in Chelatna Lake, but are common throughout the proposed area.

107

Page 202 to 210	Alternative management concepts are identified as multiple-use and primary-use. The <u>proposed</u> management concept is <u>not</u> identified. Most of these alternate management concepts seem contrived to be refuted.	108
Page 204	(Paragraph 3) How multiple use in an area of such diverse resources could adversely affect the "viability and dynamism" of the native wild-life population should be discussed. In the next sentence, conflicts with animals such as bear, and in this case probably grizzly bears, may increase with the elimination of sport hunting in the proposed extension.	109
	(Paragraph 4) What criteria were used to establish Mt. McKinley as the number one tourist attraction in the State?	110
Page 206	(Paragraph 1) How will mining in the area affect the water quality and will ranges of wolf and caribou be severely intruded upon? Although we sympathize with the problems associated with the operation of ore trucks in the park, why was no mention made of any disruption of wild-life distribution caused by eight to ten roundtrip bus tours a day in the park?	111
Page 206	(Paragraph 4) How could hunting lead to "further destruction of wildlife values north of the range?"	112
Page 208	(Paragraph 3) The adverse impacts of roads on wolf and bear ranges, and caribou migration routes should be discussed.	113
Page 209	(Paragraph 4) What wildlife populations on the south side of the Alaska Range could be increased? How would they be increased?	114
Page 210	(Paragraph 2) Define "high quality manipulatory wildlife resources." (Paragraph 4) If the wildlife population in an area is increased there is no reason to believe that non-consumptive use of the wildlife would not also increase. The area could be used as a demonstration area of what can be achieved through habitat manipulation.	115
Page 213	We wonder if the list of contributors were were individually contacted and if their input was actually considered.	
Page 222	The act creating Mt. McKinley National Park, Sec. 5 (39 Stat. 939), provides for regulations to be made for the "care, protection, management and improvement" of the park. These regulations are to be "primarily aimed at the <u>freest use</u> of the said park for <u>recreation purposes by the public</u> and for the preservation of animals, birds, and fish and for the preservation of the natural curiosities and scenic beauties thereof" (emphasis added). Referring to page 1 of the statement, the five purposes listed by the Park Service do not reflect this. The "freest use... for recreation purposes by the public," suffered a remarkable transformation in the promulgation of agency "purposes and regulations."	115

- Page 237 The scientific epithet for wolverine is Gulo luscus.
- Page 238 Red salmon (Oncorhynchus nerka), humpback whitefish (Coregonus pidschian), broad whitefish (Coregonus nasus) and lake chub (Hybopsis plumbea) are also present in the area and should be included in the list of fishes. In the proposed area, and especially if the alternative areas are considered, the following species may occasionally be encountered: Chum salmon (Oncorhynchus keta), king salmon (Oncorhynchus tshawytscha), coho salmon (Oncorhynchus kisutch), Bering cisco (Coregonus laurettae) and Pacific lamprey (Entosphenus tridentatus). The following scientific names have been spelled incorrectly in the appendix: Gairdneri, cylindraceum and Gasterosteus.
- Page 267 (Paragraph 3) Both subsistence and sport hunting and trapping exist in areas north of the present park boundary.
- Page 269 Conspicuously absent from this listing is the 1973 publication of the Alaska Department of Fish & Game Alaska's Wildlife and Habitat.

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RESPONSE TO COMMENTS BY
STATE OF ALASKA

1. That impact of all the withdrawals can best be comprehended by a consideration of the 28 separate proposals as a whole. See the response to comment 1 of the USFS, this chapter, for a detailed discussion of this subject.
2. It is not the intent of the NPS to prohibit geological or geophysical studies when consonant with the purposes of the area and the policies of the Service. See response to USGS comment 24 for a complete discussion of our intent in this regard.
3. The value of public input and consultation with local residents and others in planning the new proposals is recognized. Some contacts were made with local representatives and organizations during the limited study period designated by Congress. However, the contacts were solely to obtain information and in a few cases to seek reaction to possible alternatives for use of the land involved in absence of any specific proposal. Since final decisions were not made within the Department of the Interior until November 1973 concerning the specific Park, Wildlife Refuge and Scenic and Wild Rivers proposals there was no way to go to the public for comment on the proposals until the Draft Environmental Impact Statements and plans were released in December. The Forest Service, in the Department of Agriculture, which was involved in studying possible additional national forests did present specific proposals to the public in a series of meetings that took place in the areas of concern.

Information gathered during the studies has been augmented with comments from transcripts of the Joint Federal State Land Use Planning Commission public hearings on use of the 17(d)(2) withdrawal lands. The Federal agencies also has representatives at the public hearings to identify and take note of special problems requiring consideration. Comments received as a result of the public review of the Draft Environmental Impact Statements have also been considered in development of the Final Environmental Impact Statements.

4. AEC's have not been designated to extend NPS authority into areas beyond proposal boundaries, nor does the NPS intend to conduct a "one-way" dialogue with adjacent landowners. We recognize our responsibility toward adjacent landowners and the need for responsiveness on the part of all parties concerned. See response to comment 9, Department of Commerce letter, this chapter, for more on this subject.

5. This Environmental Impact Statement does not address the cost/benefit relationship of this and other proposals for the reasons given in the response to comment 2 of the Department of Commerce letter, this chapter. It must be assumed, furthermore, that Congress will supply adequate funds for the implementation of this proposal if it is approved by that body.
6. Enactment of this proposal will result in the transfer of some authorities and jurisdictional responsibilities to the congressionally designated Federal managing agency.

Under the legislative proposal, lands contained within the proposal boundary which lies above mean high tide are considered to be under Federal jurisdiction. The legislative proposal does not adjust any Federal-State jurisdictional responsibilities, nor does it amend, by implication, the Submerged Lands Act.

7. It is our judgment that this document makes a good faith effort to present the information in its possession in an unbiased manner. All facts relevant to the proposal and its impacts, whether advantageous or deleterious to the establishment of this park, have been included as time and the limit of our knowledge have allowed. It is recognized, of course, that in some cases our information may be incorrect or misinterpreted, or we simply may not be in possession of certain facts. However, if the advocacy you speak of colors our judgment on some points, even though every effort has been made to avoid this, it is inadvertent. It is for these very reasons that public review creates comments regarding the proposal, and that we are now responding to those comments. With the information and differing viewpoints presented by various agencies and the public through this review process we have made numerous amendments and revisions in this document, hopefully to make it as accurate and complete as all parties concerned would wish.
8. Effort has been made to correct these deficiencies. See response to comment 7, above.
9. Discussion of present wildlife resource use, both sport and subsistence, has been revised and expanded in this final EIS.
10. Revision has been made in the text to reflect the present and past occurrence of hunting activities in the proposal area.
11. A proposal for a park extension consisting solely of the area south of the present park is discussed in Alternative B-3.

Creation of a Cooperative Planning and Management Zone in place of the northern addition is not proposed because it is felt that this area consists of wildlife habitat of such a critical nature that CPMZ status would not adequately guarantee its preservation.

2. Discussion of mineral potential has been revised based on additional and more recent information from USGS.
13. This subject has been previously addressed at some length in the response to comment 24 of the USGS letter, this chapter.
14. Impacts on air transportation are not felt to be significant in the foreseeable future. Impacts on other transportation modes are considered in the revised section "Impacts on Transportation," Chapter III.
15. Plans for the development of an improved or expanded transportation system will not be made until the level of visitor use indicates it is necessary. The intent of the NPS to comply with NEPA in further planning stages is expressed in Chapter IV.
16. Revision has been made to the sections of "Tourism and Services Industries" and "Impacts on Recreation and Tourist Services" to more adequately address these questions.
17. Correction has been made of this typographical error. The correct figure in acreage is 1.6 million acres for each of the proposed additions.
18. This discussion has been added to the "Limiting Factors and Population Dynamics" section of Chapter II.
19. These deficiencies and errors have been corrected.
20. This sentence has been revised for clarity.
21. Reference here was to production areas within the confines of the proposed extensions. The Slippery Creek mine is within the present park. The sentence has been revised for clarity.
22. This statement has been revised, as have many references throughout the text regarding magnitude, location, and persons involved in subsistence activities.
23. The Cooperative Planning and Management Zone proposal is based on the fact that the south and east fringe of the McKinley portion of the Alaska Range has exceptional interest and accessibility both to Alaska residents and visitors. Very little of the usable land in this area is included within the proposal extension. The significance of this zone is based primarily on three factors: (1) the interest in maintaining a highly attractive foreground to the high mountains, (2) existing and probable near-future transportation corridors and human use areas adjacent to the

central Alaska Range, and (3) the considerable interest in developing lodges, ski developments, tramways, and the like within this region.

The proposal is to create, by mutual efforts and cooperative agreements, a formal means of providing a degree of planning and zoning within the area. It should involve all governmental and private landowners and resource managers.

Although all land managing authority for decisions on lands under their individual jurisdictions, the idea is that the cooperative efforts would tend to assure that decision making would occur within the parameter of mutually agreeable regional land use objectives, and that all parties would be intimately involved in the decision-making processes through time.

The intent of the proposal is not to extend National Park Service management into areas larger than their jurisdictional boundaries. Such action is impossible under law. The intent is rather to recognize that there are special interests of a large number of groups in this area, including the National Park Service, and to insure that these groups define common goals and work toward these goals together. It has been and continues to be the policy of the National Park Service to responsibly engage in regional and other cooperative planning efforts in the regions of which it is a part.

24. This term has been changed to "large mammal community" throughout the text.
25. The intent to comply with the National Environmental Policy Act in further planning stages is discussed in Chapter IV. General discussions of the impacts of the development proposals are included in Chapter III.
26. Revision has been made for clarity in the discussion of the purpose and intent of the NPS in regard to Areas of Ecological Concern. An expanded discussion of the areas has been included.
27. "Moose concentration area" was the intended statement. Correction has been made.
28. Revision has been made to recognize the State authority in these areas.
29. Unfortunately, the Cooperative Planning and Management Zone concept was not formulated in time to solicit the views of the participating agencies. Comments regarding this proposal, however, are included in Chapter IX of the present document.

30. Addition of these species has been made.
31. Revision of this sentence has been made for clarity.
32. Reference to specific inadequacies is now included.
33. The entrance to the park was the point referred to, and the sentence has been corrected.
34. Boundaries are set on straight lines along watershed drainages to the extent possible with the following exceptions: (1) to avoid jurisdictional conflict with State selection lands, Native village deficiency lands, and regional deficiency lands; (2) to exclude areas of known significant resources, such as known mineralization; and (3) sometimes arbitrarily to avoid incorporating excessive land mass, but to still include a representative portion of the biome. Straight lines were selected to facilitate legal identification because of the massive size of Alaska.
35. Impacts of increased tourism are addressed in Section H. The figures on pages 34 and 37 have been revised to more clearly reflect actual visitation to the park.
36. It was thought that the reader would know that "Alaskan standards" for fishing are very high. An Alaskan fisherman or a visitor coming to Alaska to fish would probably not choose the McKinley area from the many better fishing areas in the State.
37. This deficiency has been corrected.
38. This sentence has been revised.
39. The sentence has been revised for clarity.
40. The statement on page 5 has been revised to reflect the need for study to determine subsistence use levels and locations by local residents.
41. Correction has been made.
42. Reference to Nenana in this regard is now deleted.
- 43,44. The section has been extensively revised and now reflects these concerns and facts.

45. The subsistence section has been extensively revised to give a more accurate and complete picture based on the information available. The Alaska Department of Fish and Game does not distinguish between sport, commercial or subsistence hunting and trapping in its game take statistics.
46. "The Market Economy," a new section, includes trapping as a means of income.
47. This fact is recognized in the revised "Tourism and Services Industries" section.
48. Methods of visitor transportation, when determined, will be examined in an EIS for that purpose. See comment 25, this letter.
49. This fact is recognized in the revised "Economic Geology" section.
- 50,51. These facts have been included.
52. The NPS does not normally manage wildlife in the traditional sense. Rather it attempts to maintain natural conditions. For a discussion of NPS purposes in regard to this area and its resources, see the discussion referenced in response to comments 2 and 53. The NPS does not propose "better" management, but a different type for a different purpose.
53. As noted above, it is not the intention of the NPS to maintain, increase, or maximize the number of individuals in animal populations. The exception would be if any species were in danger of extirpation.
54. This statement has been amended, and the additional information included.
55. It is felt that the situation in Mount McKinley National Park cannot be usefully compared to that of other areas in that a full complement of predators exist in the subject park. This information is now included.
56. This additional information on grizzly diet has been added.
57. These references are to the same area, and the text has been revised for clarity and specificity.
58. "Prime" here is meant to mean valuable.
59. The NPS can assure protection to this habitat which could conceivably be damaged under another management system which did not place habitat values foremost.

60. The system of nomenclature used is that of the American Ornithologists Union. The Latin subspecific name has been added to Appendix C.
61. This clarification has been made.
62. This statement has been amended.
63. Red salmon has been added to the list of fish occurring in Chelatna Lake.
64. This sentence is not meant to imply that natural selection occurs only in the winter; only that the harsh conditions of the subarctic winter constitute a serious challenge to the survival of some individuals in the wildlife population.
65. Additional information has been included.
66. The text from which the quotation was taken is very lengthy and comprehensive, and therefore cannot be appended nor adequately summarized. It is listed in the bibliography for reference if desired.
67. Current operations at the Kantishna site are discussed elsewhere in the text. Also, see Ginny Hill Wood comments, this chapter.
68. The statement made is that visitation, increasing as it is at the present rate, might have to be limited to protect park resources. This is because this visitation is now confined to the area north of the Alaska Range, where wildlife populations exist in greater concentration. Limitation of visitation would undoubtedly discourage many visitors from coming to the area. Addition of parkland to the south, however, and interpretive facilities in this area, would allow greater numbers of visitors without the adverse effects of wildlife, thus allowing the normal unimpeded growth of visitation to occur. Additional developments to accommodate increased visitation will be planned as needed in conjunction with the CPMZ.
69. This sentence has been revised.
70. Such an implication is not intended. Protection afforded by the NPS is of a different type, in that protection of wildlife at naturally fluctuating levels is the goal.
71. Reference to stream pollution has been deleted.
72. This section has been revised in many places for accuracy and clarity.

73. Revision has been made in several places. Information on caribou calving ground location is taken from Henning, pages 44 and 45. (See bibliography.)
74. Revision has been made as suggested. The Sunflower Basin is not within the proposed southern extension. However, it is recognized that a small proportion of hunting activity does take place within the fringes of the proposal boundaries in this area.
75. This statement has been qualified, and changes have been made for clarity.
76. Discussion of these areas and a map appear elsewhere in the text.
77. It is recognized that visitor impacts cannot be totally eliminated short of closing the park to visitation. The National Park Service intends to minimize impacts, while still providing "....for the freest use of visitors....."
78. Reference is made here to all kinds of disturbances (snowmobile, ATV, fire, road development and other construction, etc.). The duration of the effects depend on the specific conditions of the area affected and the degree of disturbance.
79. This statement has been amended to allow subsistence use of forest resources. Since large-scale, commercial uses are not referred to here, and the capacity of the forest to renew the losses to subsistence use will never be endangered, we have not included statistics which might convey the idea that this use is larger in scale than it actually is.
80. As previously stated, mineral patents and claim groups total 7,178 acres within the Mount McKinley region.
81. The Kantishna area, the only major active mining zone in the proposed extensions, is described in this section.
82. Reference to Camp Denali has been added.
83. Owners of private homesteads and businesspeople on trade and manufacturing sites, as well as miners and prospectors, are considered nonrecreational visitors.
84. Qualifications have been made to this statement to indicate the importance of adequate snow cover in preventing this phenomenon, which has been observed by park personnel.
85. The establishment of the proposed additions does not "forever preclude" the development of any valid and existing right-of-way.

86. Valid existing claims, including airstrips, will be recognized within the proposed additions, and this type of activity will not be precluded. Operation of aircraft at locations other than at valid existing claims or at the McKinley Park Station Airport will be prohibited, except in the case of emergency or with prior written permission of the superintendent of the park, in accordance with Title 36, Section 2.2 of the Code of Federal Regulations. The NPS intends to continue to provide air access to mountain climbing parties; therefore no impact is foreseen.
87. The NPS has attempted, within the framework of a conceptual master plan, to address these impacts. For the most part the burden of providing accommodations and supplies to increased numbers of visitors will be borne by interests outside the park, and the Cooperative Planning and Management Zone is proposed as a mechanism by which the Park Service can share in and help to mitigate this responsibility.
88. This statement was based on a study by Arthur Little ("Survey of Potential Interest to Tourists," Travel to Alaska) and a 1971 study by the Alaska State Travel Division. The NPS recognizes the importance of sport hunting and fishing to the tourism industry of Alaska.
89. The source is USGS Open File Report 546, 1972. Bibliographic reference has been added.
90. Accessibility of these beds has been noted in the text as adding to their relative importance.
91. This paragraph has been revised.
92. This section has been revised.
93. The statement has been deleted.
94. Long term natural productivity could be defined as the situation where in the indigenous aquatic and terrestrial fauna and flora and the scenic landscape are conserved, perpetuated, and portrayed as a composite whole. The National Park Service does not seek to increase the biological productivity of the area.
95. This statement has been amended.
96. "Controlled hunting" is management of wildlife, while "controlled burning" is management of habitat. The latter is practiced by the NPS.

97. Additional aspects of the preclusion of sport trapping have been added. Also, see Chapter II, "Impact on Subsistence."
98. These points are discussed in the "Probable Future" section, and in the "Alternative Management" section, and have been added to the "No Action" section.
99. Trapping as a current use has been added.
100. Addition of this discussion has been made.
101. This detailed information is not available. According to the Alaska Department of Fish and Game, 1973, this area is recognized as a spring, summer, and winter moose concentration area.
102. The grizzly bear has been added.
103. This statement is now revised.
104. Impacts of the construction of this highway have been deleted. The Federal Highway Department has received proposed highway corridors from the Alaska Department of Highways, but states that "...corridor identification will not necessarily result in highway construction, as modal decisions have not been made, nor can they logically be made until such time as the transportation needs of this vast region of Alaska become more evident. (Federal Highway Department 1974, Chapter IX.) Under these circumstances, the National Park Service feels it would be premature to speculate on the size, design, or use levels of this highway, or its attendant impacts.
105. The NPS considers this a possibility, due to habitat destruction and human activity.
106. These statements have been revised.
107. Red Salmon has been added to the list of fish occurring there.
108. The proposed management concept was discussed in Chapter I. The reader is now referred to that discussion.
109. Reference to "viability and dynamism" has been deleted.
110. A study of the Alaska Travel Division, 1972.
111. This section has been revised.

- 112. This statement has been deleted.
- 113. Amendment has been made to this section.
- 114. These statements have been revised.
- 115. The quotation on page 1 has been expanded for clarity in assessing the intent of the NPS regarding this proposal.
- 116. These additions and corrections have been made to the appendix.
- 117. This statement was in error and has been deleted.
- 118. This document was consulted and has been added to the bibliography.

FAIRBANKS NORTH STAR BOROUGH

Box 1267, Fairbanks, Alaska 99707

January 21, 1974

Mr. Theodor R. Swem, Chairman
Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

In response to your letter of December 28, 1973, regarding the Draft Environmental Statement (ANCSA) of 1971 (35 Stat. 688) d-2 lands proposed by the Secretary for inclusion in the National Wildlife Refuge, National Park, National Forest, or Scenic River System; our comments are:

The listed parks, monuments, refuges, forests and ranges all merit a high level of protection; while bearing in mind the fact that certain transportation corridors are essential to the unity and economy of the state, as designated in the various inputs to the Joint Federal-State Land Use Planning Commission.

The specific area proposals list unavoidable adverse effects, including bans on mining and costly relocation of right-of-way corridors. These should be qualified in the context of state-wide effect and compared with benefits. Where the cost-benefit analysis of restrictive measures appears to be negative, solutions should be sought for achieving compatibility between nature and a reasonable level of commerce.

Very truly yours,

John A. Carlson
JOHN A. CARLSON
Borough Mayor

TAG:JAC:nic

cc: Planning and Zoning

RESPONSE TO COMMENTS BY
FAIRBANKS NORTH STAR BOROUGH

1. As has been stated previously, a cost/benefit study of this proposed action could not accurately portray the "trade-offs" since many of the benefits to be gained are aesthetic and recreational rather than economic, and cannot be quantified in dollar terms. An overall impact can most accurately and completely be found in considering the 28 proposals jointly, along with the impacts associated with each. See responses to comments 2, USFS letter, and 2, Department of Commerce letter, this chapter, for more complete discussions of these issues.

Federal-State
Land Use Planning Commission
For Alaska

733 W. FOURTH AVENUE, SUITE 400
ANCHORAGE, ALASKA 99501

July 3, 1974

Mr. Theodore R. Swem, Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

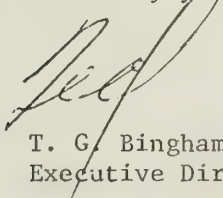
Dear Ted:

In accordance with the Commission's letter of May 28, 1974, to Secretary Morton, I am enclosing copies of our technical comments on your draft Environmental Impact Statements for the following proposed areas:

Arctic, N.W.R.
Chukchi-Imuruk, N.W.
Gates of the Arctic, N.P.
Katmai, N.P.
Lake Clark, N.P.
Noatak, N.E.R.
Togiak, N.W.R.
Wrangell Mountains, N.F.
Yukon-Charley, N.R.
Yukon Flats, N.W.R.

Cape Krusenstern, N.M.
Fortymile, N.W.S.R.
Harding Icefields-Kenai Fiords
Iliamna, N.R.R.
Koyukuk, N.W.R.
Mt. McKinley, N.P.
Porcupine, N.F.
Unalakleet, N.W.R.
Wrangell-St. Elias, N.P.
Yukon Delta, N.W.R.
Yukon-Kuskokwim, N.F.

Sincerely yours,



T. G. Bingham
Executive Director

TGB:vsc

Enclosure

Technical Adequacy Review of
Proposed Draft Environmental
Impact Statement

Completed
Only For Chapter II Description and
Chapter III Environmental Impact of
Proposed Action

Proposed Mt. McKinley National Park

Prepared by
Resource Planning Team, FSLUPC

May . 1974

Proposed Mt. McKinley National Park

Chapter II Description of the Environment

Page 39-40 Land Use

Healy may develop as a gateway town to the national park.

Comment: The location of Healy itself is probably too far removed from the new highway to be the actual site of a "gateway" town. Without land use controls, service development may occur as strip commercial. It is also not clear as to the role of the services supplied at the existing park entrance at McKinley Station.

1

Page 57 Social and Economic Considerations

Cooperative Planning and Management Zone

Comment: Cooperative planning and management is proposed for an area outside the proposed park in relation to the d2 areas. It is not clear as to which boundary this zone would include, or whether it would bilaterally consider any aspects of the operation of the proposed park in relation to the area outside the proposed area.

2

Chapter III Environmental Impacts of the Proposed Action

Page 136-137 Impact on the local economy

"Talkeetna, . . . , will play an increasingly important role in the tourism industry of the McKinley area". Talkeetna would be put in the position of a "gateway" town to the southern part of the park.

3

Comment: Talkeetna is not located on the route of the new Anchorage-Fairbanks highway. It is located at the end of a road which is 12 miles from the through highway. The town will not be a "gateway" except as an air transportation center for the park.

Page 137 Impact on the Local Economy

Nenana could also develop as a "gateway" town.

Comment: The information on page 39-40 refers to Healy as a possible "gateway town." Apparently, the significant impact of the proposed park's influence on the location of intensive community services to service park visitors is not adequately addressed.

Page 143-145 Impact on Mining and Mineral Entry

"Overall, the impact on mining and mineral entry in the region would be slight."

Comment: The overall impact of the park proposal on mining and mineral entry is said to be slight. This does not appear to resolve the impact of future mineral entry, and the impact on the mining potential will, in fact, be huge. If enacted in its present form, the proposal would engulf areas with some of the highest mining potential in the State of Alaska.

There would appear to be a current additional impact from the proposal itself. Use of the existing private lands are probably now restricted in view of the possibility of their being acquired. Investments in improvements may entail too much risk.

RESPONSE TO COMMENTS BY
FEDERAL-STATE LAND USE PLANNING COMMISSION FOR ALASKA

1. By "gateway" it is meant that the town is located so that a visitor would logically pass through or near it on his way to the park. Since Alaska compared to the lower "48" has relatively few and remote centers of services and goods for the traveler, it is thought that many will avail themselves of these things wherever available, even though the town is not directly adjacent to the park or the highway. The existing park entrance center for services will continue to operate, but the shifting of some visitation from this area to the proposed southern addition, and possible limiting of visitor access at some undetermined level at the existing entrance, will tend to stabilize or limit the growth of the existing facilities.
2. A more detailed map has been added to the text which clearly delineates the boundaries of the Cooperative Planning and Management Zone. The NPS is mandated by Congress to manage all lands with park boundaries in accordance with policies established for the NPS. However, given the foreseen cooperation between the NPS and adjacent landowners, input will come from these outside sources on park proposals and policies. This input will be carefully considered by the NPS. We recognize that cooperation requires a "give and take" on the part of all the cooperating agencies and individuals.
3. See response to comment 2, above.
4. Reference to Nenana in this regard has been deleted. It should be recognized, however, that towns such as Nenana will experience some growth in tourist related activities as a result of proximity to the enlarged park and increased visitation to it. This effect will decrease in intensity at greater distances from the park.
5. The section of impacts on mining has been revised to reflect the uncertainty as to the mineral potential of the areas involved. Given this uncertainty, any statement of impact on the preclusion of mining must be speculative at this time.

John Colberg, Jr.
Chairman of the Board

Ralph A. Johnson
President

Refer: 713



July 17, 1974

Mr. Theodor R. Swem
Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

Re: Environmental Impact Statements

Cook Inlet Region, Inc. would like to comment on the draft environmental impact statements in general, and the Lake Clark National Park proposal in particular.

Although the statements represent considerable work (and certainly an impressive volume) they also seem to be full of factual errors and incomplete data.

] 1

Regarding the Lake Clark proposal, we feel that it is improper to consider this proposal until acceptable deficiency withdrawals without (d)(2) override in the Lake Clark area have been made for Native selections.

Sincerely,

COOK INLET REGION, INC.

Larry M. Oskolkoff
Land Manager

cc: AFN
11 Regions

LMO:vc

2636 SPENARD ROAD • ANCHORAGE, ALASKA 99503 • PHONE 274-8638

RESPONSE TO COMMENT BY
COOK INLET REGION, INC.

1. On the basis of information received from the public, and more recent and accurate data, these documents have been revised in an attempt to provide the most complete and factual discussion possible.

Doyon, Limited

*527 Third Avenue
Fairbanks, Alaska 99701*

June 12, 1974

Mr. Theodor R. Swem
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear-Mr. Swem:

Environmental Impact Statements

Doyon, Limited has reviewed in some depth all of the draft environmental impact statements relating to the so-called (d) (2) "Four Systems" land withdrawals in our region. This letter is our response to your request for comments by interested and effected parties.

Each of the draft statements reflects considerable study and analysis by the prospective managers. Certainly the over-all goals and objectives cannot be criticized; unfortunately, however, the proposed methods of determining and implementing what is "good" for Alaska (and the nation) ranges from the ludicrous to the sublime. Conceptually we can support a number of the proposals but would strongly object to the enactment of others. To endorse any at this time would tend to dilute our strongest criticism of the statements as they now exist.

We have pending the result of an 83 million acre land grab. Intentionally or otherwise, each of the "Four Systems" was encouraged to compete for and justify, in any way they could, why they should be allowed to manage a given area. Bureaucratic objectivity is questionable regardless of the stated goals and objectives. Assuming the areas are to be administered as proposed, over 200 million acres of the nation's most valued lands, as well as a high percentage of Alaska's Coastal areas, will be withdrawn and placed under varying restrictions, of which the total effect has not yet been considered. We view the proposals as a first step toward needed land use planning; it seems prudent, however, to now consider the overall impact (social and economic) to the state and the nation

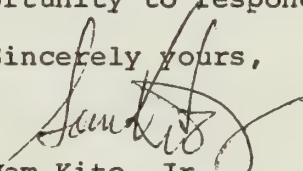
1

as a whole. The combined impact of the proposals is a necessity not to be overlooked.]

At this stage, Doyon, Limited can endorse only the need for an overall rational and coherent land use plan which will preserve and protect without frustrating reasonable development expectations. Please let the record indicate that we are using this letter as a vehicle to indicate that we feel another step should be incorporated prior to Congressional action on the proposals. There is now a need for another environmental impact statement, one that will encompass all twenty-eight proposals and their effect upon the state and the nation as a whole.

We appreciate the opportunity to respond.

Sincerely yours,



Sam Kito, Jr.
Executive Director

SK/mm

cc: Governor Egan
Senator Stevens
Senator Gravel
Representative Young
Representative Meeds
Senator Jackson
Joe Josephson - State Co-Chairman
Burt Silcock - Federal Co-Chairman
AFN
12 Regions
ANF

RESPONSE TO COMMENTS BY
DOYON, LIMITED

1. The combined impact of these 28 proposals can be most accurately and completely realized by reading the individual proposals and considering them jointly. See response to comment 2, USFS letter, for a full discussion of this.

FAIRBANKS T.V.A. DEVELOPMENT, INC.
510 Second Avenue
P.O. Box 1267
Fairbanks, Alaska 99707
(907) 452-4761 Ext. 37 or 456-4285

August 6, 1974

Theodore R. Swem, Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

I am advised by Senator Gravel's office that you are still accepting public comments on the impact statements for the so-called "D-2" or "Four Systems" withdrawals authorized by ANCSA '71, and issued in December, 1973.

I appreciate this opportunity and hope you will accept my apologies for my delay in presenting the comments of the Fairbanks Town and Village Association for Development, Incorporated.

In the way of background, the Fairbanks Town and Village Association (T.V.A.) for Development, Incorporated is an authorized Economic Development District established by Interior Alaskans under the authority of the Public Works and Economic Development Act of 1965.] 1

In May of this year, the Association published its Initial Overall Economic Development Program for Interior Alaska, and, as provided by the Act, have requested formal designation by the Economic Development Administration as an Economic Development District.

We are requesting District boundaries co-terminous with those of Doyon, Limited, the Interior's Regional Native Corporation authorized by ANCSA '71. We will be, if designated, the first Economic Development District in the state of Alaska; and with an area slightly over 200,000 square miles, we will also be the largest such district in the United States.

Our comments on the draft statements are based on the following considerations.

By our calculations, the acreage involved in the proposed Four Systems withdrawals within our proposed boundaries total over thirty-one million acres or 24% of the land mass.

Clearly a single management program for such a vast body of land in one place would be difficult to incorporate within a regional system of economic development planning and project development such as we are involved in.

Here, however, the federal government proposes, as I understand the Four Systems approach, to establish four separate management systems administered by four separate agencies, three of which are under the authority of the Secretary of the Interior and one of which is under the authority of the Secretary of Agriculture, on fourteen separate parcels of withdrawn lands within the Interior.

We believe that this is an order of complexity which makes compliance with our own Congressional mandate to seek and encourage coordination of federal efforts toward economic development within the Economic Development Districts extraordinarily difficult.

Failing to address this highly relevant issue is a major deficiency in the impact statements which should be corrected prior to initiating further action in the E.I.S. process.

Without intending to demean the great value of the separate statements in providing basic resource information about the individual parcels, I believe that the issue of the interrelationship between the various federal management systems which will be established should these proposals be adopted constitutes a "major federal action" within the purview of the National Environmental Policy Act of 1969.

As such, it will require the preparation and circulation of a separate draft environmental impact statement within the guidelines established by the Council on Environmental Quality of January 28, 1974.

Such a statement should generally present a federal point of view which incorporates the following points required under Section 1500.6 of the January 28th guidelines.

1. The overall context of Alaskan, national and international issues which will create the framework within which the Congress will likely make its decisions on the Four Systems lands. Specific discussion should center on, for example:
 - A. Energy shortages.
 - B. Material resource shortages.
 - C. "Project Independence."
 - D. Demands for wilderness areas by non-Alaskans.
 - E. National Security.

. . . with respect to Section 1500.8, Paragraph (a) (2) of the Guidelines:

2. The overall context of the Alaskan public and private system of land use, management, and regulation and the kind of adjustments which will be required in order to properly accomodate and integrate the federal Four Systems proposal.

. . and with respect to Section 1500.8 (a) (3) of the guidelines:

3. An analysis and projection of likely population changes both nationally and within Alaska which may be expected to accompany the implementation of the federal Four Systems proposal.
4. A proposal by the federal government for coordinating federal resources in such a way as to provide assistance to state and local government and Alaskan private citizens in preparing for these population changes.

More specifically, the statement should present a federal proposal -- as opposed to

four separate agency proposals -- which discusses the following points:

1. The mechanism for integrating both the long run planning and day to day management of these parcels by the designated agencies; and other interested federal agencies.
2. The procedures by which non-federal public and private interests within Alaska will be incorporated in the federal mechanism.
3. The procedures for resolving conflicts between the federal Four Systems proposal and the non-federal interests in the D-2 withdrawals.

I believe that without a single overall environmental impact statement addressed to the Four Systems concept and the kind of management structures such a concept will bring into being that the individual parcel oriented impact statements, whatever their value as resource summaries, are at best ad hoc, and at worst irrelevant to the central issue of changing federal land policy in Alaska.

In concluding these comments, I would also like to express my continuing dissatisfaction with the more or less static context within which most environmental impact statements are prepared.

This problem is probably a result of the dictionary definitions and semantic effects of the term "impact" itself. "Impact" implies a one time only occurrence as opposed to the kind of evolving organic systems of intended occurrences and random unintended effects which will over time, accompany the "major federal actions" contemplated by N.E.P.A.

Although this may not be the proper forum for a formal argument against the traditionally static orientation of the environmental impact statement, I do feel that such an orientation will continue to plague the E.I.S. process and to diminish the significance and influence in matters of public policy and decision making which was intended by the authors of N.E.P.A.

Finally, I have listed on an attachment the D-2 withdrawals which are either totally or partially within the boundaries of our Economic Development District. I would appreciate it very much if you would place our name and address on your permanent mailing lists for all materials relating to these lands.

Thank you again for this opportunity to comment on these draft statements.

Sincerely,

FAIRBANKS T.V.A. DEVELOPMENT, INC.



Jerry Smetzer
Executive Director

JES:bjs

cc: Senator Gravel, Washington, D.C.

Attachments

D-2 WITHDRAWALS IN INTERIOR ALASKA

<u>WHOLE</u>	<u>TOTAL ACREAGE (Millions)</u>	<u>TOTAL WITHIN The EDD (Millions)</u>
# 1 Gates of the Arctic National Park	8.36	2.53
# 8 Mt. McKinley National Park Additions	3.18	2.49
# 9 Wrangell-St. Elias National Park	8.64	.07
#10 Yukon-Charley National Rivers	1.97	1.97
#12 Yukon Flats National Wildlife Refuge	3.59	3.59
#13 Arctic National Wildlife Refuge Additiona	3.76	1.68
#14 Koyukuk National Wildlife Refuge	4.43	4.43
#17 Yukon Delta National Wildlife Refuge	5.16	.18
#21 Porcupine National Forest	<u>5.50</u>	<u>5.50</u>
Total	44.59	22.44

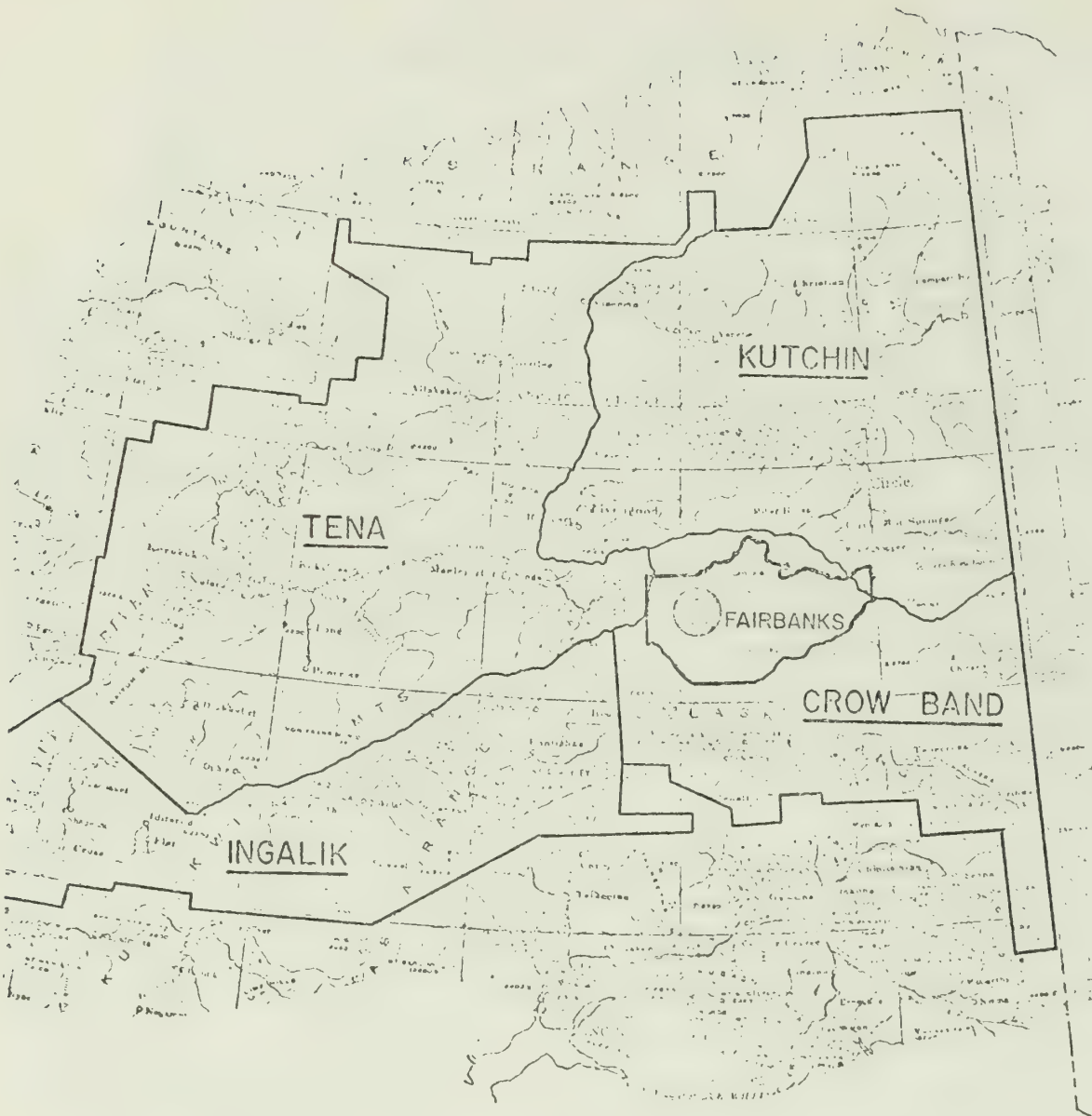
National Forest Proposals

#22 Yukon-Kuskokwim National Forest	7.30	6.56
#23 Wrangell Mountain National Forest	<u>5.50</u>	<u>1.48</u>
Total	12.80	8.04

National Wild and Scenic Rivers

#25 Fortymile National Wild and Scenic River	.32	.32
#26 Birch Creek National Wild River	.20	.20
#27 Beaver Creek National Wild River	<u>.20</u>	<u>.20</u>
Total	.72	.72

Grand Total	<u>58.11</u>	<u>31.20</u>
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INTERIOR ALASKA

This map shows the regional boundary of the Fairbanks Town and Village Association; Doyon, Ltd.; and the Tanana Chiefs' Conference. The cultural and linguistic boundaries of the four sub-regions are also shown, as is the Fairbanks North Star Borough boundary. The urban Fairbanks area--the region's growth center--is also shown.

100 miles
SCALE

RESPONSE TO COMMENTS BY
FAIRBANKS T.V.A. DEVELOPMENT, INC.

1. Fairbanks T.V.A. Development, Inc., has been included in Chapter I, "Interrelationships with Other Projects and Agencies," of this document. Our intent is to work closely with this, as well as other, regional planning agencies.
2. The environmental impacts of these proposals can be most completely explored and discussed on an individual basis, and the aggregate impact consists of the sum of the impacts of the individual actions considered together. See the response to comment 1 in the USFS letter for a complete discussion of this question.
3. These are not proposals by separate agencies, but rather proposals by the Secretary of the Interior. As such, cooperation between the various agencies charged with the management of these lands will be carried out under his direction. In the section of Chapter I titled "Interrelationships with Other Projects and Agencies" the intent of the NPS to cooperate and coordinate management of the expanded Mount McKinley National Park with other landowners, Federal, State, and private, is discussed. Conflicts will be handled on a case-by-case basis, but all interests will be represented and all views heard.

The Alaska Center for the Environment
913 West Sixth Avenue
Anchorage, Alaska 99501

July 21, 1974

Mr. Ted Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

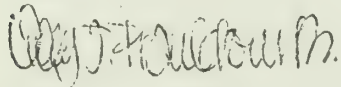
Dear Mr. Swem:

Enclosed please find our comments on the second set of draft environment impact statements for proposed d-2 land designations in Alaska.

Included are comments on Iliamna, Unalakleet River, Portymile River, Togiak Refuge, Koyukuk Refuge, Harding Icefield/ Kenai Fjords, Yukon Flats Refuge/ Porcupine National Forest, Katmai National Park, additions to Mt. McKinley National Park

We thank you very much for the opportunity to make comment on the statements and sincerely hope that some of our suggestions will be implemented.

Very truly yours,



Vicky J. Frankfourth
/Alaska Center for the Environment

Enclosures

THE ALASKA CENTER FOR THE ENVIRONMENT
COMMENTS ON DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE
PROPOSED ADDITIONS TO MOUNT MCKINLEY NATIONAL PARK

We agree with and support enactment of the proposal as put forth by the National Park Service; however, we also urge the inclusion of Alternatives B5 (area north of present northeast section of the park), Alternative B8 (area west of Tonsona River and Amos Larke), and Alternative B9 (Lake Chelatna) in the area to be so designated as new parklands.

We also urge the inclusion of the Yanert River Valley, east of present park boundary, in the Cooperative Planning and Management Zone.

We urge the prohibition of mining except in the Kantishna area.

We urge that hunting and trapping be prohibited except as a means of management under strict NPS supervision.

We concur with the lengthy discussion by Ms. Ginny Hill Wood in giving the Kantishna mining area a special Historical/Cultural/Recreational designation which would be regulated and managed by the National Park Service.

We believe that maps in the EIS for the McKinley Park area should include more topographic features to make the location and description of areas as detailed as possible.

We urge that the subjects of tourism and outdoor recreation be treated as distinct subjects (not lumped together), and that their implications, significance and impacts be treated likewise.

1

2

Because the south slope lowlands have been given to the State for management and utilization, the NPS proposal as stated in the DEIS does not preserve a whole representative biotic unit or ecosystem. We believe that these lowlands should be included in the proposal; or, if not, the impact of relinquishing of the south slope lowlands to the State of Alaska should be thoroughly discussed and examined.

Although we urge the inclusion of the Lake Chelatna area into the proposal, what is tentatively planned for the area in the DEIS? What is the environmental impact on action or no-action in this area?

3

We suggest that a larger area of the foothill zone on the south side of Mount McKinley be included in the area of ecological concern. We also believe that more of the Tonsona River area be included.

Why is Talkeetna not included in the cooperative planning zone? It seems to us that it should be included.

4

We suggest that a delineated history of the land status changes and park designation changes of the area from 1969 be written into the final Environmental Impact Statement. Such a history is important to the better understanding of the area in concern.

5

There seems to be contradictory statements concerning mining in the proposed area on pages 5 and 144. What is the specific policy in this regard?

6

There is question as to whether subsistence hunting is allowed or not in the area. In the DEIS on page 132, continued subsistence is allowed (as per legislation); but on page 151, it is not permitted.

7

There is no discussion of the inclusion into a Wilderness Preservation System under "Alternatives to the Proposed Action." Why is such a designation not discussed?

8

Why isn't "Primary Use" (wilderness) concept covered in the Alternative Management Concepts in pages 202-209?

We suggest a fuller and more detailed discussion of the impacts of Devil's Canyon and Denali Hydroelectric projects, rather than the brief mention given such subjects on page 135.

9

We believe that more stress and importance should be placed on protection of critical habitat for caribou in Alternatives 12 and 13.

We also suggest that the final EIS should discuss the locations of the proposed State transportation corridors in the Mt. McKinley Park area and the mode of transportation for each corridor.

10

RESPONSE TO COMMENTS BY
THE ALASKA CENTER FOR THE ENVIRONMENT

1. A topographic map has been added for more accurate reference.
2. Revision has been made in the organization and discussion of these activities to more clearly reflect the differences between the description of the activities themselves and the economic implications of these activities. The sections of "Regional Recreational Opportunities" and "Impact on Recreation and Tourism" discuss the present uses of the area in this regard, and the effect of the proposal in limiting or enhancing the opportunity for continued uses. The sections of "Tourism and Services Industries" and "Impact on Recreation and Tourist Services" discuss the economic implications of these uses. The discussions of both the uses themselves, and the economic aspect of these uses have been revised and expanded.
3. The Lake Chelatna area is included in an Area of Ecological Concern. Impacts associated with the inclusion of this area are contained in alternative B-9. Discussion of impacts on this area resulting from management by an agency other than the NPS would be improper, since this EIS can only discuss impacts resulting from the implementation of this proposal.
4. Talkeetna is thought to be too far from the park to be considered a foreground area, although it will play a role in the expansion of the tourist-related outdoor recreational services industries, which is expected in the region.
5. This proposal reflects the land status at the time of printing. Changes in land status since that time are reflected in the revised land status map.
6. The statement on page 5 was in error and has been deleted. New mineral entry will be precluded, but valid existing rights will be allowed to continue under increased control.
7. Present subsistence uses will be allowed to continue. See Chapter I, "Legislative Proposal" section, for a more complete discussion of the intent of this proposal in regard to the subsistence issue. Also see response to comment 7, Soil Conservation Society letter, this chapter.
8. Wilderness status was not considered under "Alternatives to the Proposed Action" because the proposed action is for the entire area of the proposed park. For many different reasons some of the parklands will not qualify for wilderness designation, and such lands as do cannot be so designated until a proper wilderness study has been made. The concept of wilderness is a designation of land status and such lands as qualify will be made apart of the National Wilderness System after the final action of Congress on the proposed additions to the park. (See Appendix E.)

9. It is felt that the negligible impact of this proposal on these hydroelectric projects is adequately treated in the text. However, additional consideration of the impacts of alternatives B-11 and B-14 have been added. See comments by the Alaska Power Administration, this chapter.
10. According to the Federal Highway Administration, final modal decisions have not yet been made for these transportation corridors. (See their comments, this chapter.) Proposed corridors are shown on the transportation map.

TANANA-YUKON CHAPTER
Alaska Conservation Society

-Box 80071
College, Alaska 99701

July 22, 1974

Theodor R. Swem, Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

The Tanana-Yukon Chapter of the Alaska Conservation Society appreciates the opportunity to comment on the draft Environmental Impact Statements for the proposals on the D-2 lands in Alaska. Copies of our comments on the proposals listed below are attached.

Yukon Flats National Wildlife Refuge
Yukon-Kuskokwim National Forest
Yukon Delta National Wildlife Refuge
Porcupine National Forest
Mt. McKinley Park Extensions
Alaska Coastal National Wildlife Refuge
Cape Krusenstern National Monument
Arctic National Wildlife Range Extensions
Noatak National Arctic Park
Katmai National Park
Additions to Chugach National Forest
Harding Icefield-Kenai Fjords National Monument
Yukon-Charley National River
Gates of the Arctic

Sincerely,

TANANA-YUKON CHAPTER, ACS

Tina Stonorov
Tina Stonorov for
Richard H. Bishop
President

Comments on PROPOSED MOUNT MCKINLEY PARK EXTENSION, DES 73-83

For the Tanana-Yukon Chapter, Alaska Conservation Society -
By R. H. Bishop July 1974

The Tanana-Yukon Chapter of the Alaska Conservation Society is keenly interested in Mt. McKinley Park, its management, and the welfare of its physical features and biologic resources.

Within our membership, personal acquaintance with McKinley Park ranges from the casual knowledge of brief visits to first-hand familiarity borne of many year's experience living in or near the Park. It is safe to say that none of these people are insensitive to the fact that the particular combination of a spectacular landscape and a grand assemblage of Alaskan wildlife make McKinley Park a rare place, even among wild areas of Alaska.

Our membership is also quite aware of the strong feelings and traditions that have developed about the Park and its use. While many areas of Alaska may be more "wild", and are perhaps even more scenically spectacular, for many people McKinley Park embodies all the images evoked by the word "wilderness". The intangible values people attach to the Park are additive to its considerable recreational, scientific and economic values, and enhance its total value to society. For these reasons, the Park in its barest essentials stands as a unique asset to man, and it is unnecessary to embellish facts about it, as we are tempted to do to make the point that it is unique.

Because of McKinley Park's great importance to the public, and to the National Park Service as a cornerstone of its program in Alaska, and because of controversy precipitated by rumor of the Park's proposed expansion, we anticipated a carefully prepared, soundly reasoned, well documented objective Environmental Impact Statement, that would demonstrate that the proposals made were the best alternatives for the lands involved. Unfortunately, the draft statement approaches the antithesis of our expectations.

In the following comments, we will attempt to review what we feel are major deficiencies in the statement and to give examples of lesser errors of fact or interpretation. Our comments will primarily relate to the proposed North Extension, with which we are most familiar.

Comments on Part I

Several statements made with regard to the legislative proposal are (1) opinion stated as fact, (2) unsupported by data or reference to data, and/or (3) illogical.

On page 1, the intent of Congress in establishing the Park is quoted from the Federal law as follows: "...for recreation purposes by the public and for the preservation of animals, birds, and fish and for preservation of the natural curiosities and scenic beauties thereof." Then on page 2 it is stated that the Additions proposed are in part to accomplish the original intent of Congress. The implication seems to be that these Additions are necessary to accomplish the original intent of Congress, but that seems a matter of opinion, unsupported by the excerpt from the original law.

Also on p.2, the research mentioned on large mammals is in no way identified. It is also stated that the proposed addition is to ensure perpetuation of the so-called "large mammal ecosystem"; we are unaware of such a natural entity. Neither can we deduce what "sufficient range within ecologically manageable boundaries" might mean.

In Table 1, p.2, we were surprised to learn the proposed Additions totalled 3.2 acres, while the text suggests the Additions total 3.4 million acres.

On page 5 it is stated subsistence uses within the proposed Additions are not known to occur, and it is stated, "Therefore, such uses will not be allowed...", with exceptions. We fail to see the logic involved, and we suggest the reason subsistence uses are not known is that no one looked. The rationale for prohibition of sport hunting is not given in Part I; we will refer to this again below. Although the above reference to subsistence uses may only apply to the basic proposed Additions in the context of page 5, we assume it would also apply to whatever other Additions may be included if alternate proposals are added.

The proposed creation of a cooperative management zone has considerable potential merit, but it is unclear from the discussion how agreement on management would be reached, and differences resolved.

The justification for designating areas of ecological concern range from good (No. 1) to poor (Nos. 2,3,5) as given on pages 16 and 17.

The statment (p. 20-21) that McKinley Park provides an incomplete ecosystem is meaningless, because definition of ecosystem is somewhat arbitrary, and because wherever an administrative boundary may be established, the contained "ecosystem" will be incomplete, with some elements lying beyond the boundary. Further, (p.20-21) to say that the present Park "prevents the preservation of the integrity of scenic resources and geologic phenomena" is false. The present Park boundaries do not prevent preservation beyond them, but the boundaries do limit National Park Service involvement. To say preservation is impossible outside the boundary is false. No reference is given to Park Service studies that have proposed Park extensions in the past.

5

Comments on Part II

The rationale for the boundaries of the McKinley region is not given and appears arbitrary (p.29).

6

The nature of man's influence on the large mammal predator-prey ecosystem (sic), and the basis for declaring that the influence is moderate is not given (p.29). Is the nature and extent of man's influence known by the authors? The manner in which "visitor use" figures are used on page 34 is highly objectionable and their real meaning can not be determined. Data apparently include counts of through traffic on the Anchorage-Fairbanks highway, yet all are called "visitor use" figures, with a parenthetical explanation that large portions of this "use" were "non-recreational traffic". What is "visitor use" and how is visitor use, recreational use and especially non-recreational traffic, which presumably does not stop at the visitor center, estimated? What is "recreational use"? If the figures given are correct, true 1971 visitor use was 44,552, while in 1972 it was presumably 88,625. That is an impressive increase if it is at all reliable, so why confuse the issue by throwing in 217,402 "visitor uses" (whatever unit that is) that apparently just went on by on the new highway, or on the train? If this non-recreational traffic is of concern, the concern should be explained.

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Is it necessary or desirable to distinguish between Native and non-Native subsistence uses on page 39? We applaud the recognition (p.49) that non-Natives also engage in subsistence use of fish and game - not fish and animal, as the statement has it. However, that recognition has had no lasting impact on impact statements in general, nor on this one in particular.

9

We submit that subsistence income (p.49) includes not only pro-

ducts of the land used directly by people, but money produced by such activities as trapping, etc. The authors seems to imply (53), that because native resource use patterns have changed, there is no longer any subsistence use in the proposal areas. Further, the discussion of subsistence income is oriented to Natives only; so mention of subsistence by non-natives is made, although there are several white people who pursue a subsistence life-style in and/or near the northern proposal area(s). These people live at Lake Minchumina (up to three individuals, formerly more), one white person lives at Bearpaw for six to eight months of the year and traps, and there may be others. There are also trappers from Nenana on the Kantishna River within the proposal area. Records of beaver harvests are readily available, although specific locations of trapping need to be determined by field observations, and may vary from year to year.

We are concerned that the subsistence life-style of these scattered few people, whose need for the products of the land is great, but whose impact is probably negligible, may be defined out of existence. If subsistence use is defined as being "necessary for human survival" as it has been in numerous impact statements, their way of life is doomed. That definition of "subsistence" is not valid in contemporary Alaska. Similarly, if "subsistence" is defined as direct use of resources, with no sale of any or all of resources obtained, these people's life style is again doomed. In the course of reviewing numerous D-2 statements, we have attempted to inform people who write, review and revise D-2 statements about contemporary subsistence life-style by repeatedly pointing out several important facts: (1) Both Natives and non-Natives presently pursue a subsistence life-style in Alaska today, and have for years; (2) No one is likely to die if subsistence use of resources is prohibited, but numerous people would suffer nutritionally, culturally (both Native and non-Native), and economically; (3) Contemporary subsistence life-style requires some cash which is used to buy various clothing and foodstuffs, gas, oil, etc. and various equipment such as boats, motors, hand tools, guns, traps, ropes, snow machines, nets, etc. etc. etc.; (4) Despite the fact that no one presently uses Stone Age implements or lives solely by direct consumption and barter of resources; many people pursue by choice and/or necessity a way of life that provides them with relatively great freedom from the constraints of conventional American society, and provides a means of living in close company with the land and its life. To do so, these people forego many of the comforts and conveniences of society and the basic pattern of their activities is a subsistence life-style: a substantial dependence on obtain-

ing resources of the land for their livelihood.

It is most disturbing to visualize the vast additions proposed for McKinley Park with the small areas of subsistence use superimposed on them, and realize that through the collective ignorance of government, such use could be prohibited. It is even more disturbing to realize that this would be done unnecessarily, and on behalf of numbers of people whose appreciation of the environment is by circumstance rudimentary compared to that of the people whose way of life was denied.

In addition to the areas mentioned above where a subsistence life-style is pursued, it should be noted that several people now live at Telida, a growing village, and that their hunting and trapping activities extend into the proposal area. It is also important to note that the same hunting and trapping areas are not necessarily used in consecutive years. This is particularly true of beaver trapping; an area may be trapped only every two or three years, in order to allow the beaver population to increase. Similarly, year-to-year differences in distribution or numbers of moose, caribou or furbearers may dictate change in use areas from year to year. The statements on page 54 implying little or no subsistence use around Telida and Lake Minchumina indicate to anyone familiar with the area that the authors did not bother either to inquire about the area or to go find out for themselves. Data on animals taken, in the form of harvest reports, sealing records, and interviews with residents and other records and estimates, are available for several species of big game and furbearers hunted or trapped in the areas discussed above. Also, caribou are taken by residents of Telida and Nikolai wherever they are found; for Nikolai hunters in the last five years this has generally been from the South Fork of the Kuskokwim River west, but caribou most often are found south and east of Telida if they are available at all. People from Minchumina have in the past usually found caribou to the south.

Time and space preclude providing in these comments all the data available on hunting and trapping in and near the proposed Northern Addition.

While no good estimate of size of the McKinley caribou herd is presently available, all indications are that it is substantially less than 10,000 animals (p.90). It is our understanding that moose are probably a more important prey species than caribou for wolves at the present time.

Murie's 1944 estimate of grizzly bear numbers (p.100) is apparently repeated on p. 123, but associated with a different geographic area. The statement that some grizzlies, which range out of the Park are hunted and killed conveys the impression that hunting of grizzlies occurs along the Park boundary all the time, which is not the case. Hunting seasons are set by State regulations: however, they are not always observed. For that matter, neither is the closure to hunting in the Park.

11

Golden eagles are said to be common "throughout the area", but the area is not defined, and golden eagles do not nest in or regularly frequent lowlands such as the proposed Northern Extension.

12

Red Salmon are present in Chelatna Lake (p.107). The silt in the Kantishna River (and many others) apparently does not "inhibit fish activity". (p.107).

13

The statement that the net annual productivity of plants and animals is low is not consistently true, and is a poor generalization (p.107).

14

Production of grasses, sedges and willows is often substantial, and one has only to think of years when hare, lynx or Microtus populations are rising to realize that productivity can be very high. Similarly, productivity of moose in Interior Alaska in favorable years has equalled that in most other areas of North America.

The effect of low decay rates in cold soils must certainly be a problem in disposal of liquid and solid wastes, but it was a little surprising to see it mentioned under "limiting factors and population dynamics".

Studies of which we are aware indicate that little or no additional food is required to maintain body heat among species adapted to living in the open in winter, such as arctic foxes, wolves, and some sled dogs. Observations of wolves killed in winter indicate their normal winter condition is to be fat. The same seems to be true of wolverine, though fewer observations have been made. On the other hand, it is known from laboratory studies that caribou and black tail deer normally eat less in winter than at other times of the year, and these are indications that moose do likewise. Thus, the statement that additional food is necessary to maintain body heat in winter seems to have been made without having checked what information is available.

15

There are enough well documented facts available to show that life is not easy for northern animals, without the authors resorting to speculative, unsupported statements.

We question that restrictions on visitor use of the existing Park will "impede the growth of the tourist industry at fairly low levels", except in the Park itself (p.121).

It is difficult to understand how mineral development in the Kantishna and Stampede districts could pollute streams in the Park, since all drainages in these areas flow out of the Park (p.122). Perhaps the answer lies in the definition of "district", which is not given.

The questions of effects on mammals and birds if the proposal is not adopted, is not adequately discussed nor documented.

The statement (p.123) that large mammals of the proposed Extensions exist in an unaltered ecosystem is false, as is the next sentence, and it is most unfortunate that such statements were made. The chief rationale for extension of the northern boundary of the Park is to provide additional protection for habitat and wildlife in that area. The assumption is correctly made that through poor or no regulation of development north of the Park, habitat degradation could occur that could eventually have negative impact. The assumption that large mammals that range out of the Park exist in an unaltered ecosystem cannot be correct. Development of various kinds and hunting or trapping would be eliminated from the proposal area to protect the supposed ecological balance, yet hunting, trapping and development have occurred to some degree and in various areas since the northern boundary was established. Thus, whatever the present relationships between habitat-prey-predator may be, they are the product of all the forces which have been acting upon them for years, and the proposition that moose, caribou, wolves, etc. are part of an unaltered ecosystem is untenable. A less defensible proposition is hard to imagine as a rationale for extension of the Park boundary.

The discussion states hunting pressure other than for caribou at Kantishna is very light, but no documentation is provided. Reports of moose and caribou killed by hunters are required by the State for most of the areas included in the proposed extensions, but no mention is made of these data, nor of how they compare with other areas. It is known that moose hunting both north and south of the present Park is quite popular. The statement made earlier that grizzlies ranging north out of the Park are hunted

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and killed suggests the authors believed that grizzly bear hunting was a serious matter, and in another place concern is expressed about wolf hunting.

The area cited as a "concentrated calving ground" for moose has been cited in another publication as a moose calving area, but with no reference to its relative importance or degree of use.

The discussion of the effects of hunting on population genetics is inaccurate, contradictory, and self-defeating. To the best of our knowledge, selective removal of specific kinds of animals has only had a noticeable effect on some population characteristics where removal rates were very high. If harvest or kill of game is as light as the authors maintain earlier in the discussion, it is unlikely to have any influence on population genetics whatsoever.

21

The assumption that exclusion of residential development around lakes will help perpetuate waterfowl populations, implies a greater potential impact of residential development than exists. Most lakes involved, and especially those of greatest value to waterfowl, are largely unsuitable for residential development and are relatively inaccessible (and likely would remain so because of marshy terrain). In addition, there are numerous examples of lakes with considerable human activity around them that sustain good waterfowl production.

There is sufficient evidence to show that large mammals do move in and out of the north side of the Park. It is logical that habitat destruction or excessive disturbance could have a negative impact on these species. It is also logical that hunting and trapping has an impact on these species and that such use could, and perhaps has, materially altered population levels, and/or predator-prey relationships. We believe that the maintenance of healthy wildlife populations in and adjacent to McKinley Park is a matter of crucial importance, and that necessary measures to accomplish this should be taken. The basic requisite is habitat protection, the secondary consideration is maintaining wildlife populations.

It may well be that the northern Extension of the Park boundary is the best or the only way to accomplish the necessary protection, but the information set forth in this Statement not only does not demonstrate that such an extension is the best alternative, it does not adequately review any other alternative. As we indicated, at the beginning of these comments, this is extremely disappointing.

The discussion of impact on vegetation (p.125) does not reflect any review of data on the incidence of fire in the proposed Extensions. It is well known that not all fires are attacked, and that not all fires attacked are subdued. Does the record of fires in the proposal area suggest that any substantial change in the frequency, location or size of fires in the proposal areas would occur if a "let burn" policy were adopted?

22

We submit that no prohibition of existing subsistence uses should be allowed in any proposed Park extension until a mutually agreeable, workable definition of subsistence use be developed by the National Park Service and representatives of subsistence users, such as village and regional native corporation leaders (p.132), and residents themselves. It should also apply equally to non-Natives. There is no evidence in this proposal that the Park Service understands what contemporary subsistence use is. Further, there is no evidence either in this proposal or from other data sources that even suggests that the existing subsistence uses north of the Park would have any effect on the integrity of the proposals. Because of the allocation of lands, as a result of ANSCA, it may not be possible for subsistence users to simply pick up and move to a different area, nor would it be just to require such a move unless their continued use promoted some serious impact on the proposal area.

23

The anticipated impact on sport hunting, guiding, and sport fishing is not adequately discussed (p.133-134). The assumption that these activities are of little importance in the proposal area is open to serious contention, and should be documented. Data is available, and it is our understanding that the Park Service was provided with a list of guides using the proposed extensions, and data on hunting pressure and game killed by sport hunters, but no mention of these data are made, not even a statement rejecting them if in fact they were inconclusive. The impact of displacement of such hunting pressure is not adequately discussed.

24

We reiterate that no evidence has been presented to indicate that present subsistence uses by residents adjacent to the proposed north Extension would have any significant impact on the area (p.151). On the other hand, displacement of this use could cause hardships for the people involved.

25

There is no evidence presented that establishment of the proposed extensions will provide "better hunting, trapping and subsistence use opportunity within the greater region" (p.153).

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There is no evidence presented in this statement, nor available

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elsewhere that we are aware of, to indicate that Park Management would enhance moose calving grounds indicated in Alternative B-1 (p.162-163). The most important identified calving grounds in Interior Alaska are the Tanana Flats, which lie adjacent to Fairbanks and have been used as a bombing and gunnery range for over thirty years. Even the Department of Highways would not attempt to put a road across the swamp south of Lake Minchumina (p.164)! Have you asked them?

Alternative B-3, (p.169) could allow effects on wildlife north of the Park if no regulation of roads, mining or hunting or trapping occurred. The impact statement has not established any logical basis for extension of the Park as being the best or only alternative to protect habitat and wildlife. We favor habitat and wildlife protection in this area, and we suggest that the proposal be re-evaluated in such a way that a logical comparison of alternatives can be made.

28

Although we feel less well informed about the proposed south extension, we suggest that the proposal to include the small area of caribou summer range, the McKinley massif, and the Cathedral Spires is probably justified (p.170). The relative merits of including more of the foothills lowland areas are debatable, but analysis of impact on other uses seems inadequate.

Alternative B-5 (p.175) is perhaps one of the most important wildlife areas from the standpoint of the need for habitat protection and regulation or elimination of hunting. We suggest the Park Service attempt to negotiate agreement providing the required protection, and if that fails, push for its inclusion in the extension.

However, if the wildlife has survived hunting till now, it is unlikely to be eliminated as the statement suggests, and a better justification should be planned. We have not heard any evidence to suggest the State considers the wolves the "dominating resource".

29

Alternative B-6 (p.175-176) has little or no merit from the standpoint of its contribution to the Park extension and it would have considerable impact on subsistence hunting and trapping of a number of people at Minchumina for whom the area is of first importance.

The authors obviously did not check on who uses the area for what. One native allotment and trapline lies within the area and another trapline extends into the area. In addition other people of Minchumina do hunt for food in that area.

30

There is no sufficient justification given for Alternative B-8.

We would recommend a cooperative management agreement for the area involved in Alternative B-9 rather than annexing an area already developed to such a degree. We also note that the stated purpose of the southern extension was to include the main mountains and glaciers rather than to emphasize wildlife areas. We recommend against alternatives B-10 and B-11.

If Cantwell and Ahtna want Alternative B-12, they should get it.

Alternatives B-13 and B-14 are not even reasonable.

Finally, we would support Ginny Hill Wood's proposal regarding the Kantishna mining/town area, submitted in June 1974.

We strenuously object to a proposal such as this that seemingly places the public, conservation groups, and sympathetic public service agencies in the untenable position of having to "take it or leave it", when to "take it" means to support an illogical, inappropriate and inadequate plan that may provide some measure of the goals sought, while to "leave it" means to face anew the process of reviewing, criticizing, suggesting and hoping for an objective, sensitive analysis of the issues and solutions. To be offered such a choice is an insult to vitally interested, intelligent people, and an invitation to duplicity we can not accept.

In summary, we support some of the goals set forth in this proposal, especially that of habitat and wildlife protection in the proposed North Extension, however, we submit that analysis of the issues and of alternative solutions and their impacts was not adequately done, and that the statement probably does not meet the requirements of the NEPA.

We believe that sufficient data is available to demonstrate the need for additional habitat and wildlife protection immediately north of the Park and we request that this proposed extension be re-evaluated using those data and new data gathered by investigation.

RESPONSE TO COMMENTS BY
ALASKA CONSERVATION SOCIETY
(TANANA-YUKON CHAPTER)

1. The research mentioned has now been identified in the text. Revision has been made to the term "large mammal ecosystem"; it is now referred to as a community.
2. Correction of this typographical error has been made.
3. Recognition and information relating to present subsistence uses of the proposal area is now included in the text. The alternatives which discuss changes in boundary locations affect only the size and shape of the proposal. The administrative and legislative sections of this EIS will apply to the park, no matter which final boundary configuration might be adopted.
4. The organizational and procedural mechanisms by which agreement can be reached has not been developed at this stage of the proposal, but it is felt that the mutual benefits accruing to all participants will add to the spirit of cooperation necessary for effective dialogue.
5. Revisions have been made in the text to recognize that agencies other than the NPS can protect the resources in their management control. A discussion of the ecosystem referred to in this statement is now included in the Chapter II titled "Limiting Factors and Population Dynamics."
6. The boundaries delineated on this page are given only to locate the region in relation to other known points in central Alaska, and to locations which will be later mentioned in the text.
7. This statement is based on the best judgment of the NPS Mount McKinley National Park study team, after careful consideration of available data.
8. The paragraph giving visitor use figures has been revised. In addition, a graph with forecasts of recreational visitation has been added.
9. As indicated in response to a previous comment, additional information as to present subsistence activities in the proposal area has been added to the text, and also a revised discussion of NPS intent in regard to subsistence. It is fully recognized

that this activity is important for cultural as well as economic reasons. The NPS will not consider racial or ethnic factors in any study of the subsistence issue, but will solicit information and input from all interested parties in the in-depth study proposed in this document. See the response to comment 7 of the SCS for a more complete discussion of NPS intent in this regard.

- 10,11,12,13&14. These statements have been amended.
15. This statement was in error and has been deleted.
16. This statement has been revised for clarity.
17. Reference to stream pollution has been deleted.
18. Revision has been made to the "No Action" alternative to include this discussion.
- 19&20. These statements have been revised.
21. This statement has been qualified to reflect its theoretical nature.
22. No substantial increase is foreseen. Some increase in the area affected by individual fires may occur, but is not expected to be significant.
23. The text has been revised to reflect NPS concern in this area. See the "Administrative Action" section of Chapter I for the reference to a study proposed by the NPS, to be conducted with the cooperation and input of local residents, to determine the extent, location and type of subsistence activities in the park area. No action will be taken to limit subsistence uses before the completion of this study, except in the case of a pressing need for protection of some resource(s).
24. This section has been extensively revised, based on information supplied by the ADF&G.
25. See the response to comments 3 and 23 above.
26. This statement has been deleted.
27. This statement has been deleted.

28. It is recognized that this area could be managed by agencies other than the NPS in such ways as to provide protection to the natural environment similar or identical to that afforded by park status. Only the NPS, however, has historically favored such a management policy over uses for other purposes.
29. This statement has been amended based on information from the State of Alaska in comments on this proposal.
30. As stated before, these additional users and uses are recognized and will be considered in the forthcoming study if this proposal is enacted.



ALASKA GEOLOGICAL SOCIETY

P. O. BOX 1288
ANCHORAGE, ALASKA 99501

-June 24, 1974

Mr. Theodor R. Swen
Chairman-Alaska Planning Group
U. S. Department of Interior
Washington, D.C. 20240

The Alaska Geological Society, affiliated with the American Association of Petroleum Geologists, recognizes its obligation to speak and act on environmental problems. The responsibilities of the earth scientist as stated in the AAPG Environmental Policy include:

- 1) Maintenance of a quality environment,
- 2) Provision of man's material needs by planning and supervising the extraction of mineral resources, and
- 3) Participation in the conservation and wise use of resources.

In this context the Society respectfully submits the following general comments for your consideration concerning the Draft Environmental Impact Statements prepared for lands withdrawn for classification pursuant to Section 17 (d) (2) of the Alaska Native Claims Settlement Act. We also plan to submit additional comments on individual draft statements under separate cover.

GENERAL COMMENTS

Certain problems are apparent in all of the draft EIS's. The major problems are:

- 1) The geologic descriptions provided are inadequate. In each case the descriptions merely emphasize the lack of basic resource data available for the proposed withdrawal areas. For example, the statement prepared for proposed additions to the Chugach National Forest does not even mention the word "Geology". Nine sentences purport to describe the "Minerals, Oil and Gas" of an area comprising 672 thousand acres.
- 2) The impact statements do not meet the same high standards of scientific research required of industry by Federal agencies. A typical example is the statement for the proposed Selawik National Wildlife Refuge. In the description of the environment, an unreferenced list of mineral occurrences" in certain areas of the Kotzebue Sound Region" highlights the geological section on page 76. The bedrock of the region is undescribed, as are the geologic structure, seismicity and groundwater potential.

1

- 3) The impact statements seem designed to justify the proposed actions rather than to analyze objectively the far-reaching implications of each proposal. The reasoning under "Impact on Mining and Mineral Entry" of the proposed Kobuk Valley National Monument is revealing:

"Since prospecting would not be allowed, there may never be a complete inventory and analysis of these (mineral) resources. Therefore a full assessment of the impacts of the proposal's preclusions of resource removal would not be carried out." (from page 215; emphasis added.)

- 4) Many of the statements dismiss the impact of banning mineral exploration and production as minimal because of the supposed low potential or relatively small area of the proposed withdrawal. Such reasoning ignores a fundamental characteristic of mineral deposits: their limited areal extent. The cumulative effect of all withdrawals is also ignored.

The Selawik proposal again is representative:

"However, in our judgment it is doubtful that foregoing the extraction of the deposits would have more than minimal impact on the industry or on the industry or on the total need of the nation since the potential is believed to be low within the refuge and not sufficient to affect the nation's supply and demand for the resource." (from page 171; emphasis added).

These comments cover a virtually unexplored area of 1.4 million acres adjacent to another (Kobuk) proposed withdrawal of 1,850,000 acres.

RECOMMENDATIONS

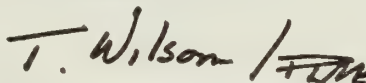
Before large tracts of land are closed to mineral entry, the U.S.G.S. should pass judgment that ore deposits or petroleum fields are not likely to be present. In order to make this judgment, the U.S.G.S. should supervise detailed geological, geochemical, and geophysical exploration by its own personnel, other State and Federal agencies, and private industry. Withdrawals accomplished without this judgment will be subject to great pressures for future exploration and development when commodity shortages intensify. It will be easier to maintain park and refuge integrity if the U.S.G.S. can prove that further exploration would be either fruitless or economically infeasible.

When the d (2) proposals are given further consideration, additional studies should more carefully refer to existing geological literature. Most important is the series of resource evaluations now being conducted by the Alaska State Division of Geological and Geophysical Survey. If existing literature is not fully utilized, the impact statements could easily become the objects of protracted litigation.

We appreciate this opportunity to comment on behalf of the membership of the Alaska Geological Society.

Yours very truly,

Thomas Wilson,
President



By: Robert L. McCollom
Environmental Committee Chairman

LM:cw

RESPONSE TO COMMENTS BY
ALASKA GEOLOGICAL SOCIETY

1. The geological description of the Mount McKinley area has been extensively revised, based on recent USGS information.
2. The cumulative impact of these proposal is gained by a consideration of the separate documents together. See the response to comment 2., USFS letter, for a complete discussion of this point.
3. To the greatest extent possible, the areas of known potential for mineral development were excluded from this proposal. See the response to comment 24., USGS letter, for a more complete discussion.

ALASKA OIL AND GAS ASSOCIATION

308 G STREET * SUITE 221
ANCHORAGE, ALASKA 99501
AREA 907 272-2519

July 19, 1974

Mr. Theodore R. Swem, Chairman
Alaska Planning Group
U. S. Department of Interior
Washington, D. C. 20240

Mount McKinley National Park
Draft Environmental Statement
73-83

Dear Mr. Swem:

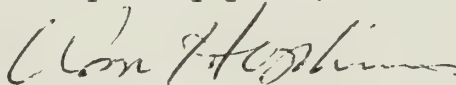
The Alaska Oil and Gas Association has carefully reviewed the proposal to add 3,210,000 acres to Mount McKinley National Park, to establish a "cooperative planning and management zone" adjacent to the enlarged park, and to restrict public use and enjoyment of the resources of the enlarged park.

The proposal area includes areas of significant mineral potential, the importance of which we believe was inadequately considered in the draft statement. These potential resources are, in our opinion, so important that no restrictions should be placed in the way of their exploration and possible development. Neither exploration nor development of these potential resources would be permitted if these areas were to be included in an enlarged National Park, and for this reason we recommend that no lands be added to Mount McKinley National Park.

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We thank you for the opportunity to submit our views on this matter.

Very truly yours,



WILLIAM W. HOPKINS
Manager

WWH:mc

RESPONSE TO COMMENTS BY
ALASKA OIL AND GAS

1. The sections describing the economic geology of the area and the impact of the proposal on mining have been extensively revised.

**ALASKA WILDLIFE FEDERATION
AND SPORTSMEN'S COUNCIL, INC.**

1700 GLACIER AVENUE, JUNEAU, ALASKA 99801

AFFILIATES

try

March 15, 1974

Range Chapter,
Valton League
~~Conservation Society~~
ity of Alaska Wildlife Club
a Chapter,
Valton League

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
National Park Service
Department of Interior
Washington, D. C.

Range Association
Sportsman's Association
Rifle & Pistol Club
can Rod & Gun Club
n Command

Re: Mt. McKinley National Park

Guides Association
age Sportsman's Association
aska Valley
nan's Association
portsman's Association
Sportsman's Association
Valley
nan's Association
rial Sportsmen, Inc.

Dear Mr. Swem:

The Council does not believe the document proposing the additions to subject Park supports (1) the need for such a large area (2) the need for ignoring recommendations of the State-Federal Planning Commission and (3) the denial of the State and Native land selections, and (4) the need for single use Park purposes rather than multiple uses.

] 1
] 2

Our final recommendations will hinge on the legislation proposed by Congress.

Sincerely,

Bud Boddy

A. W. "Bud" Boddy, Executive Director
Alaska Wildlife Federation and Sportsmen's Council

cc: National Wildlife Federation
All Council members

RESPONSE TO COMMENTS BY
ALASKA WILDLIFE FEDERATION & SPORTSMEN'S
COUNCIL, INC.

1. Recommendation of FSLUPC were considered in the development of this proposal. See Chapter I, section 4.
2. State and Native selections will not be denied by this action.

April 29, 1974
Bryan Outdoor Resources Group
Bryan, Ohio

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U. S. Department of the Interior
Washington, D.C. 20240

Dear Sirs;

We are the Outdoor Resources Group of Bryan, Ohio. We are writing you on the N.E.P.A. proposal to preserve Alaskan Sands. The Outdoor Resources Group consists of about 50 members ranging in age from 13 to 19. We are very concerned about what happens to our public lands.

1. Mount McKinley National Park Additions. We are in favor of this proposal but think that the problems or impacts of omitting Chelatna Lake from the park should be analyzed. Also to be considered are the significant impacts on the park proposal that have resulted from the 1972 giveaway of critical lands on the south to the State of Alaska, or whether such lands should be included in the park,] 1
2. Katmai National Park. We feel that this land should be made into a Wilderness Area instead of a National Park. The long term impacts on the park or wildlife values which would result from the omission of the Battle Lake and Alagnak River watersheds should be understood.
3. Aniakchak Caldera National Monument. We recomend this land be made into either National Park or Wilderness Area instead of a National Monument. The impacts of non-restricted hunting, the impacts of hunting the area's critical bear population, the impact of private inholdings through native ownership within the monument, and the alternative of establishing a brown bear wildlife refuge adjacent to the monument should be discussed.
4. Harding Ice Field-Kenai Fjords National Monument. We recomend that this land also be made into either National Park or Wildlife Area instead of a Monument. This proposal should allow native-selected lands (with the natives consent) to be included within the monument boundaries. The alternatives of establishing a major national park to include national forest lands to the east of Seward to Prince William Sound and eliminating the conflict with natives by identifying deficiency withdrawals outside their corporation boundaries should be brought forth.

5. Cape Krusenstern National Monument. We favor this 350,000 acre area north of the Arctic Circle in northwestern Alaska to be turned into a National Monument. Also, we feel that other alternatives of including additional lands to the north and east-if not selected by the natives-should be included in the proposal. This area would preserve the archeological sites which are a link to every known cultural period in Arctic Alaska.

6. Kobuk Valley National Monument. This proposed monument (approximately 1,850,000 acres), located above the Arctic Circle in northwestern Alaska's central Kobuk Valley should also include the essential withdrawn lands within the monument if not selected by the natives. We feel this area should be turned into a wilderness area which would exclude all commercial ventures and protect the many species of wildlife that already exist there.

7. Lake Clark National Park. We feel that this proposal of (2,610,000 acres) north of the existing Katmai National Monument on Cook Inlet be made into a wilderness. We also feel the following things should be discussed. 1. The impacts on Cook Inlet natives, who have considerable interest in the area. 2. The alternatives of a land swap with the state for the Wood-Tikchik area. 3. The alternative of withdrawing lands for the Cook Inlet natives outside their regional corporation. The reason we want the National Parks turned into wilderness areas is because wilderness areas allow hunting and parks do not. If hunting is not allowed in all the proposed national parks, this would put too much hunting pressure upon surrounding areas not included in national park areas.

8. Wrangell-St. Elias National Park and Wrangell Mountain National Forest. We feel that these should be made into wilderness areas. We feel that mining from within these areas should be excluded and the alternatives of adding land to the proposals should be discussed.

9. Gates of the Arctic National Park. We feel that more consideration should be given to the alternatives for this national park. The following alternatives would create a great national park. 1. Adding state lands to the south. 2. Adding portions of Naval Petroleum Reserve No. 4 (PET 4) to the north. 3. Creating a great National Wilderness Park. 4. Creating a cooperative wildlands area with the north slope natives, to include some of their lands jointly.

10. Yukon-Charley National Rivers. We favor this river unit (approximately 1,970,000 acres) in east-central Alaska, be made into a wilderness area. It is known for its undisturbed nature & fine cross section of interior Alaska flora and fauna. We oppose this area to be made into a national park because mining within its boundaries would be allowed.

11. Chukchi-Umuruk National Reserve. We are in favor of this proposal because we think the watershed values critical for waterfowl, and problems inherent in "dual administration" should be discussed adequately.

12. Alaskan Coastal National Wildlife Refuge. We are in favor of this proposal. However, we feel that the inclusion of additional coastal and off-shore areas along with surrounding waters and submerged lands essential to protect complete island ecosystems should be included in this proposal.

13. Arctic National Wildlife Refuge. We feel that this proposal, which would establish a 375 million acre Arctic National Refuge in the northeast corner of Alaska, extending along the Canadian border from the Yukon basin to the Arctic Ocean is necessary to the survival of nearly 130 species of migratory birds and 40 species of mammals and 31 species of waterfowl who frequent this area. Also we strongly favor the existing 8.9 million acre Arctic National Wildlife range, withdrawn by Public Land Order in 1960, to be added to the refuge.

14. Llamma National Resource Range. We strongly favor this area (2.05 million acres of land and water on the northern end of the Alaska Peninsula) to be added to the National Wildlife Refuge system, but oppose the joint management of the area by the BSEW & BLM, which would permit multiple use activities. Government administration with BLM is unacceptable management method for the critical salmon and bear resources present there. Also we feel conflict between oil developments & hard rock mining & wildlife resources should be discussed. Also we feel the Wood-Likchik area should be added to the proposal.

15. Noatak National Arctic Range. We favor this area, which includes 7.5 million acres in northwestern Alaska, be added to the National Wildlife Refuge System, to protect two major arctic valley ecosystems now virtually unaffected by civilization. Also including the Noatak River and the 57 mile long Squirrel River. We oppose the joint management by BSEW & BLM under a cooperative management plan because it would be a giveaway to the BLM and its commodity exploitation advocate. The area should be established as a National Wildlife Refuge and permanent protection should be provided for the Arctic caribou herd's calving area.

16. Koyukuk National Wildlife Refuge. We favor this proposal to set aside 4.4 million acres in the Koyukuk-Innoko area, which produces an annual fall flight averaging more than 80,000 ducks and geese and is an important staging area for other migratory birds as a wildlife refuge. However, we oppose the giveaway of half of the proposal to the BLM and Forest Service. We also feel the impacts of the "potential for mining" on the wildlife should be discussed.

17. Selawik National Wildlife Refuge. We favor the Chamisso National Wildlife Refuge, established by proclamation in 1940, to be redesignated as part of an approximately 1.4 million acre Selawik National Wildlife Refuge. We feel this area is vital because it produces about one-third of all waterfowl within the region. We feel the severe impacts of allowing mining in the area should be discussed. Also, the alternatives of automatically including additional critical habitat areas, if the natives do not select them and impacts on and the relationship with the local natives should be discussed.

18. Toziak National Wildlife Refuge. We feel the 2.74 million acre proposed refuge land which includes the coastal mountain area between Bristol & Kuskokwim Bays in Southwestern Alaska, 400 miles west of Anchorage and adjacent to the rock cliffs of Cape Newenham National Wildlife Refuge, one of Alaska's most important seabird nesting areas, is a vital area because it is the crossroad for waterfowl and shorebirds coming from wintering areas throughout the Pacific Ocean. We also favor the addition of Substantial lands to the north and east. We also feel the impacts of leaving the area susceptible to mining should be discussed.

19. Yukon Delta National Wildlife Refuge. We strongly favor approximately 5.10 million acres of the Yukon-Kuskokwim river delta, including the 2.8 million acre Clarence Rhode National Wildlife Refuge be designated as a national wildlife refuge. This area is critical to the survival of many species, especially swans, white fronted geese, continental black brant, emperor geese, and cackling geese, because this area is their best nesting ground.

20. Yukon Flats National Refuge & Porcupine National Forest. We feel that not just these two areas, but all of the Yukon Flats area should be a national wildlife refuge. This would increase the range for all types of wildlife, which is needed for their survival. We feel that the impacts of mining, logging, and other resource exploitations encouraged by the Forest Service in North America's most important waterfowl area should be seriously discussed.

21. Yukon-Kuskokwim National Forest. We feel that this area should be turned into wilderness. We feel the impacts of wildlife, the overall range impacts of Mt. McKinley, and impacts of commercial forest land in the park should be discussed at length.

Yours truly,

Thomas F. Wagner
For - (sponsor)
Bryon High School
1111 D. ...

RESPONSE TO BRYAN OUTDOOR RESOURCES GROUP

1. The impacts referenced here are not impacts of the implementation of this proposal, and are therefore not discussed as such in the text of this document.

THE
NATIONAL
FEDERATION
OF

BUSINESS AND PROFESSIONAL WOMEN'S CLUBS, INC.
of the United States of America



2012 MASSACHUSETTS AVENUE, N. W.
WASHINGTON, D. C., 20036
293-1100

February 8, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

I have recieved your letter requesting The National Federation of Business and Professional Women's Clubs, Inc. to submit recommendations on the Draft Environmental Statements of the Alaska Native Claims Settlement Act (ANCSA) of 1971 (35 Stat. 688). Our organization is involved with many legislative matters, however this is not an item on the current platform. Therefore we can not take a position for or against the statement pertaining to the Alaska Native Claim Settlement Act.

Thank you for giving us an opportunity to recieve the material.

Sincerely,

Lucille Shriver
(Mrs.) Lucille Shriver
Director

LS:dmm

THE CONSERVATION FOUNDATION

1717 Massachusetts Avenue NW Washington DC 20036 • (202) 265-8882 Cable: CONSERVIT

January 22, 1974

Mr. Theodor R. Swem
Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

I wish to acknowledge your letter of December 28, 1973, and its transmittal of draft environmental impact statements on 28 Department of the Interior proposals under Section 17(d) (2) of the Alaska Native Claims Settlement Act. The Conservation Foundation has a long background of interest in, and studies concerning, Alaska and we are following closely the tremendously significant proposals for the creation of new National Park, Wildlife Refuge, National Forest and Wild and Scenic River areas there. We appreciate your forwarding the impact statement to us.

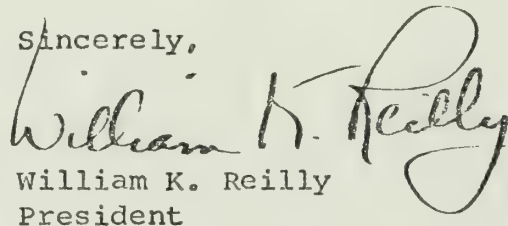
As Mr. Atkeson has explained to you, we ourselves expect to undertake a one-year study of the management issues involved in Congress' final designation of the D-2 areas. Rather than make isolated comments on the impact statements on the basis of the information available to us now, we propose to prepare a systematic report on these management issues that will take account not only of the impact statements but also the forthcoming recommendations of the Federal-State Land Use Planning Commission and our own field survey of selected D-2 areas in Alaska. We will keep you advised of the progress of our study and hope to work in close cooperation with both the Department and the Land Use Planning Commission.

I would like at this time, however, to compliment your Alaska Planning Group on the excellent work in the impact statements. Our preliminary review indicates that they are

both thorough and useful. In particular we wish to compliment the exposition of alternatives on the various areas and the very clear identification of "areas of ecological concern" extending beyond the boundaries of the particular D-2 area proposals. These aspects assure that the public and the Congress will have available to them the type of impact and policy analysis intended by the National Environmental Policy Act.

One observer has already identified the Alaskan D-2 area designations as having as great long term significance for the Nation as the original adoption of the National Park concept at Yellowstone 100 years ago. We concur in this view of the importance of your work and will hope to play a helpful role on our part in clarifying the issues involved in the ultimate decisions to be made by the Congress.

Sincerely,

A handwritten signature in dark ink, reading "William K. Reilly". The signature is fluid and cursive, with the first name "William" and last name "Reilly" clearly legible. The middle initial "K." is written in a smaller, more compact script. The signature is positioned to the left of the typed name and title.

William K. Reilly
President

cc: The Honorable Rogers C. B. Morton
The Honorable John C. Whitaker

ECOLOGY CENTER OF SOUTHERN CALIFORNIA

2315 WESTWOOD BOULEVARD • SUITE E • LOS ANGELES • CALIFORNIA 90064

POST OFFICE BOX 24388
LOS ANGELES, CALIFORNIA 90024
Telephone (213) 475-1619

April 21, 1974

Mr. Theodor R. Swen
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swen:

We would like to comment upon the draft Environmental Impact Statement for the proposed Mount McKinley National Park Additions.

We feel that this proposal has been needed for a long time. We are especially heartened by the imaginative proposal for a cooperative planning and management zone adjacent to the park's boundaries.

We are disturbed to find that the impact statement does not discuss the impacts on the National Park from the 1972 transfer of certain lands on the south to the State of Alaska. We feel this has bearing on the present proposal, and that the impact statement should analyze whether these lands should be included in the new expanded park.

The Statement also does not consider the environmental impact of omitting Chelatina Lake from the park.

Thank you for your consideration.

Sincerely,

Nancy Pearlman

Nancy Pearlman
Executive Director

1

RESPONSE TO ECOLOGY CENTER OF SOUTHERN CALIFORNIA

1. The impacts presented in this document are those resulting from enactment of this proposal. Other impacts which do not result from this action are beyond the scope of this EIS.

EXPLORATION DEPARTMENT
WESTERN DIVISION

CRANDALL D. JONES
MANAGER

June 4, 1974

Re: Draft Environmental Statements
"Four Systems" Lands
State of Alaska

Mr. Theodore R. Swem
Chairman, Alaska Planning Group
United States Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Pursuant to the "Notice of Availability of Draft Environmental Statements" which was published in the Federal Register, 38 FR 35508, December 28, 1973, as amended by "Notice of Extension of the Review Period" which was published in the Federal Register, 39 FR 7817 February 28, 1974, Exxon Company, U.S.A. makes comments as follows:

We have examined the twenty-eight Draft Environmental Statements and it appears to us that the statements accurately assess the impact of the planned uses on these lands. We feel, however, that since the proposed plans would have the effect of closing to entry approximately 64 million acres under the public land laws, including the mineral leasing laws, the alternative to this (i.e., allow mineral leasing) should be given more consideration in these statements.

While there may be time in the future for public expression on the desirability of the legislative proposals, it is our opinion that once the Environmental Statements are finalized it becomes extremely unlikely that the plans will then be amended to provide for mineral leasing of any lands within the withdrawn areas.

Millions of acres of Alaska lands have been unavailable for oil and gas exploration for several years due to the Native claims. Now that the time for Native selection of lands is near, pursuant to the Alaska Native Claims Settlement Act, it seems to us that now is also the time for the Secretary of the Interior to seriously consider an orderly opening of public domain lands to mineral leasing as opposed to permanently withdrawing these lands from oil and gas exploration. While much of the land, proposed to be withdrawn from mineral leasing under the "Four Systems" plans, does not presently appear to have an oil and gas potential, future information may considerably alter this. The critical shortage

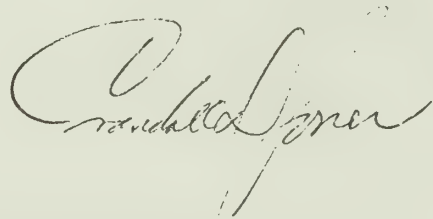
June 4, 1974

of oil and gas in the U.S.A. is, in our opinion, a strong reason for the Secretary of the Interior to carefully consider the oil and gas potential of these lands prior to placing them in classifications which would permanently withdraw them from oil and gas exploration.

We shall sincerely appreciate your consideration of our above comments.

Very truly yours,

CDJ:mws

A handwritten signature in cursive script, appearing to read "Randall A. Jones". The signature is written in dark ink and is positioned to the right of the typed name "CDJ:mws".



FAIRBANKS ENVIRONMENTAL CENTER

Box 1796
Fairbanks, Alaska 99707
(907) 452-3312

James E. Kowalsky, *Director*

July 22, 1974

Mr. Theodorel Swem
Chairman
Alaska Planning Group
National Park Service
US Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem,

Enclosed are the comments on seventeen (17) Draft Environmental Impact Statements for Secretary Morton's recommendations for the National Interest Lands withdrawn for study purposes in Alaska under Section 17 d-2 of the Alaska Native Claims Settlement Act of 1971.

Our comments are made after review of the Draft Statements by members of our center, other members of the community, and other citizens from other areas in Alaska. Among the reviewers are people personally familiar with the areas under study and some who live near them in several cases. Others are professional biologists of various specialities, geologists and others from among the science community.

Our comments on these remaining seventeen (17) Drafts are submitted jointly with the Friends of the Earth whose Alaska Field Representative has assisted in coordination of the reviews and drafting of the comments. The comments are generally a review of the technical adequacy of each impact statement. In many instances certain questions are asked about the adequacy of data in attempts to get the full story on how certain proposal decisions were made.

The Fairbanks Environmental Center is happy to take part in this process of citizen participation in what we feel is one of Alaska's, and the nation's, greatest land planning opportunities. We hope that our comments will be helpful, and that our questions will be fully answered.

Sincerely,

Barbara M. Tabbert

Barbara Tabbert

President

FAIRBANKS ENVIRONMENTAL CENTER, Inc.

FRIENDS OF THE EARTH

DAVID BROWER, *President*
Box 1796, FAIRBANKS, ALASKA 99707
(907) 452-3312

JIM KOWALSKY, *Alaska Representative*

July 22, 1974

Mr. Ted Swem
Chairman, Alaska Planning Group
National Park Service
US Department of the Interior
Washington, D.C. 20240

Re: Comments on remaining d-2 statements

Dear Mr. Swem,

I am very pleased to enclose the comments on the remaining seventeen (17) Draft Environmental Impact Statements. They are submitted jointly for these seventeen (17) only by Friends of the Earth and the Fairbanks Environmental Center.

The comments represent the personal reviews of the Drafts and separate comments of Alaskans from many walks of life and from many areas of Alaska. These people range from professional scientists and resource managers to students, to FOE members of all walks of life. I am personally pleased that the NEPA process allows Alaskan citizens and others the chance to take part in this process.

In addition to the comments as they appear in each set, Friends of the Earth makes these additional remarks.

The areas below are hereby proposed by Friends of the Earth, Inc. to be placed into the United Nations World Heritage, an international program conceived at the recent UN Stockholm Conference on the Human Environment. Further information on the United Nations World Heritage may be obtained from David R. Brower, Chairman Friends of the Earth International, 529 Commercial, San Francisco, California 94111.

The areas we propose are: as follows (certain of these are within S.2918):

National Parks and Monuments

Gates of the Arctic (or Nunamuit substitute)
Yukon-Charley Rivers
Cape Krusenstern
Wrangells
Lake Clark
Aniakchak Caldera
Mount McKinley

Nat'l Parks and Monuments con't

Katmai

Ecological Reserves

Noatak

Chukchi-Imuruk

Kenai Fiords

National Wildlife Refuges

Alaska Peninsula National Brown Bear Range

Yukon Delta National Wildlife Range

Koyukuk National Wildlife Range

Coastal

Yukon Flats National Wildlife Range

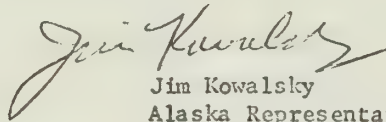
Iliamna National Wildlife Range

Togiak National Wildlife Range

Arctic National Wildlife Range

FOE will propose certain wild rivers for the World Heritage at a later date.

Sincerely,



Jim Kowalsky
Alaska Representative
FRIENDS OF THE EARTH, Inc.

c:c David R. Brower

Enclosures

Summary: Description of Proposal

NPS objectives are supported.

Certain key areas on the southern slope of the Alaska Range within the proposed southern lowlands were left out without explanation as a result of settlement 9-72 of an Egan vs. Morton dispute. Public d-2 lands originally withdrawn for their importance to this park proposal under Congressional ANCSA mandate were, in effect, used as barter by Secretary Morton to settle a dispute.

In this process NPS primary goal-the preservation of representative biotic units or ecosystems-was dashed. Throughout Alaska no other d-2 NPS proposal provides opportunity to achieve this goal as it was provided here prior to the Morton settlement.

Was Congress consulted ? Does the 9-72 Egan vs. Morton out-of-court settlement bind on the current state/federal administrations only? On Congress?

Draft Statement indicates 85% of proposed south extension is icefield, glacier and rock, similar to the 88% of ice and rock proposed for the Wrangell-St. Elias National Park. What is the impact to primary NPS goals in yielding most d-2 southern lowlands to the state to settle a dispute? What is the impact of such actions upon public lands policy-making?

Where is the state/federal comparative management^{plan} promised for Chalatna Lake townships relinquished in the Egan/Morton 9-72 settlement? Since it is missing from Interior proposal

400

S. 2917, what is the future of this valuable but lost lowland addition?

What are the impacts of this state/federal cooperative planning arrangement? What are its features?

What are the impacts if no promised cooperative venture is forthcoming?

What are development trends in this area of the Gravel plan?

Interim Management of d-1

Interim management of d-2 and d-1 lands is already producing conflicts throughout certain withdrawals, and the incidence will likely increase.

Will d-1 lands (.5 million acres) proposed in the north addition be subject to the 1827 Mining Law? With what resultant impacts? To plans for a Rex, Kantishna, McGrath road proposed by the Alaska Department of Highways? With what resultant impacts? Does either above action preempt Congress' prerogatives under ANCSA Sec. 17(d)-(2)?

Has Interior consulted Congress on either action?

Area of Ecological Concern

Southern foothills are excluded by some choice unexplained in the Draft. Why? What other plans by what other parties preempts this necessary inclusion? What now can enable Interior to add these lands to the park?

Cooperative Planning/Management

An excellent proposal. Precisely how it will work is not clearly stated. Denali Citizens Council (citizen McKinley Park watchdog organization) report Matanuska/

Susitna Borough are favorable to zoning in^{on}/early consideration of idea. What are their plans? Denali State Park plans? Do these relate to the park proposal? How?

Why are these boundaries located where they are?

Why not further south?

Land Status History Informs Decisions

Readers need understand the numerous land status changes and proposed changes to understand how decisions have been shaped by past events. Again, an accounting of McKinley withdrawals lost in the Egan/Morton 9-72 settlement is necessary to this understanding. Analyses and maps showing status changes should reveal:

- 1.) Interior Secretary Udall proposed withdrawal for boundary extension
- 2.) Resultant state (Miller)/federal agreement to reduce same
- 3.) McKinley park status, ^(d-2/d-1) upon passage of ANCSA, 12-71
- 4.) State filing on lands including d-2 withdrawals, 1-72
- 5.) Morton withdrawals as per ANCSA 3-72
- 6.) Morton recommendations to Congress S. 2917, 12-73.

Mineralized Areas As Alternatives

These^{should} not be dealt with, as they are, on an either/or basis. a) Ten years of exploratory work in the southern mineralized areas (Collinsville, Peters and Dutch Hills-Golden Zone) could help determine suitability for addition, or b): management of these threshold park lands within the national recreation area concept.

Similarly, the upper Tonzona River drainage (alternative 8), and Lake Chelstna (alternative 12) could be included as an

alternative to the proposal action.

Would national recreation area management on these lands permit sport hunting? Controlled mineral extraction? Other uses?

Archaeology and History

Prehistory of the Mt. McKinley area and the proposed area are not known contrary to statements in the draft.

Archaeological investigations have been few and somewhat questionable.

Areas in question are noted by the Alaskan Natives for fine hunting; in certain areas particularly for Dall sheep, moose, etc.

A permit for investigation and excavation of Ray Creek archaeological site, (15 miles from present park boundary) was applied for by Dr. Roger Powers and Charles E. Holmes University of Alaska, Fairbanks. This is a "multi horizon" site and speculative dates are 11,000 B.P. (C 14 dating is now being done).

A site of possible great importance was found within 20 miles of the present park boundary. It contains pottery which seems to be made of the Nealy type clay. Pottery requires at least a semi sedentary culture. This area is known to be Athabascan and known for sheep hunting. If the site proves out it would be the first Athabascan pottery found.

There has been too little done regarding the prehistory

investigation of this area to make the assumption the proposal makes.

The history of the area is well known since contact. More information from the Soviets would be helpful in researching the continuum of man's occupation in the new world.

There is noted lack of description of impact on the archaeology as non-renewable resource. Little is being done under the Antiquities Act and Prehistoric Act in this or other park areas in Alaska. One such site is reported destroyed along the Stampede Trail in the proposed northern extension.

Other actions and plans for the Healy- Stampede Trail are vague, and contradictory (pages 41, 175). A map should be used if this trail enters d-2 lands.

Wildlife, Northern Addition

Critical caribou habitat gets short shrift which Alternative 12 and 13 would protect. These areas are past calving summering areas, important to the integrity of the park's caribou herd.

Wolves are reported seen regularly around Lake Minchumina, to 10 to 15 miles east of the lake (page 10).

Would grandfather trapping rights be granted to just those several trappers with lines in the northern extension?

Another alternative to comparatively analyze and map is found within S. 2918, 1-74; and H.R. 13564, 3-74.

8

9

10

11

12

RESPONSE TO COMMENTS BY
FAIRBANKS ENVIRONMENTAL CENTER

1. The Chelatna Lake area is included in the Cooperative Planning and Management Zone described in Chapter I. See comment 2., State of Alaska letter, for a discussion of the features of the Zone.
2. All lands included within the proposal area will, if the proposal is enacted, be withdrawn from mineral entry subject to valid existing rights. Impacts of the preclusion of mineral entry and possible relocation of transportation corridors are discussed in Chapter III.
3. The Secretary has based his decision as to which lands to include in this proposal on the basis of benefits gained and lost by such action.
4. Procedural and organizational mechanisms for the Zone have not yet been developed. The views of all interested parties will be considered.
5. The land status at the time of this proposal is given in the text. The land status map has been revised to indicate the most recent status of land in the area of the proposal.
6. During the study process for this proposal the idea of a National Park Service complex including a National Park and an adjacent National Recreation Area was considered in conceptual terms. No boundaries were ever considered. The national recreation area alternative was not pursued for two reasons. First, the primary purpose of a N.R.A. is to provide broad recreational opportunities to a large segment of the American public. Criteria to be applied for selection, establishment and administration of such areas are found in Circular No. 1, Recreation Advisory Council, "Federal Executive Branch Policy Governing the Selection, Establishment, and Administration of National Recreation Areas." Among these criteria are those requiring that an N.R.A. be located so as to provide recreational facilities to areas with high population densities and a deficiency of other areas with recreational potential. Clearly, the area surrounding Mount McKinley National Park does not meet these and other criteria. Second, a national recreation area alternative does not allow the kind of cooperative planning and decisionmaking the Secretary feels is necessary and desirable in this particular part of Alaska. The Cooperative

Planning and Management Zone, as well as Areas of Ecological Concern, have been proposed to insure the preservation of park values, while allowing full resource utilization in this area. In this way the essential advantage of an N.R.A. to the park is realized, and degradation of the purpose for and criteria of N.R.A. establishment is avoided.

7. Statements in the text were not meant to imply that the prehistory of the area is well known. Reference is made to the paucity of research data presently extant. We recognize the need for continuing study in this area and will continue to cooperate with representatives of recognized institutions as in the past. Reference to the research being conducted by Powers and Holmes has been added to the text. The impacts section reflects our concern for the identification and preservation of archeological, as well as historical, resources and inclusion of them into the National Register.
8. Reference to State plans for the improvement of this trail has been deleted. This route has the status of proposed transportation corridor, for which final decisions on development have not been made. It does pass through d(2) land in the Stampede area.
9. This information has been included in alternatives 12 and 13.
10. This information has been included.
11. Subsistence uses presently occurring in this area will be continued pending a study to determine and define the level and type of subsistence use of these lands. See response to comment 7., SCS letter, for a full discussion of this point.
12. This alternative has been included as alternative B-15.



Inspiration Consolidated Copper Company

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Telephone: N.J. - 201 540 - 9898 - N.Y. - 212 344 - 6865 / Telex: 136310

RICHARD R. HYDE
President

April 1, 1974

Mr. Theodore R. Swem, Chairman
Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

In response to the Department of Interior's invitation to submit comments on the draft environmental statements for the proposed National Parks, Wildlife Refuges, Forests, and Wild and Scenic Rivers in Alaska (Federal Register, Vol. 38, No. 248-Friday, December 28, 1973), I have comments concerning some of the areas in which we were or are actively exploring for mineral deposits.

The Mount McKinley National Park proposal includes small mines or mineralized districts south of the existing park which have good mineral potential. Specific areas of interest include the Golden Zone Mine, Partin Creek, and Ohio Creek. Others undoubtedly exist within this mineral belt which should be carefully evaluated before withdrawal as a National Park.] 1

The Wrangell-St. Elias National Park proposal for south-central Alaska is also an area of high mineral potential which should have sufficient subsurface geologic exploration to either prove or disprove the existence of commercial ore bodies before being locked into a National Park. I noted in your environmental statement, "Early mine sites testify to the region's historic mining era," and I regard this as good evidence for the existence of mineral deposits. Also, as noted in your National Forest System Proposals under 23 on page 14, "It has a variety of outstanding resources that suggest a need for multiple-use management, including minerals, recreation, fish and wildlife, and outstanding scenery. It contains deposits of copper and associated minerals which some experts consider highly significant."

Other areas listed in the National Forest System Proposals which I believe should be under multiple-use management are numbers 21. Porcupine National Forest," and 22. "Yukon-Kuskokwum National Forest." I also believe number 25. "Forty Mile National Wild and Scenic River" should be under multiple-use management. It obviously has mineral potential which should be carefully evaluated before withdrawal. The draft statement acknowledges, "In 1886, the first gold in Alaska was discovered in the Forth mile basin."

We are somewhat familiar with the above five from the list of 28 and feel that hasty selection of candidate areas for single-purpose rather than multiple-use is completely unnecessary, unrealistic, and ill-advised. We strongly recommend continued public management of this land under the multiple-use--sustained yield concepts with environmental constraints.

Mineral regions in Alaska are widely distributed geographically and geologically and, where well studied, show rational relations with other geologic entities. They do not necessarily show well ordered relations with land management boundaries even though they constitute some of the most important potential mineral resources of the United States.

Current data allows definition of numerous belts of some mineralized regions. Others undoubtedly exist. The known and anticipated metalliferous areas lie partly on state and federal land which are open to mineral entry, partly on lands currently of D-2 type.

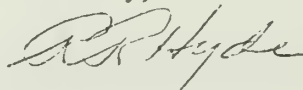
These areas should not be included in any single-use system until after a complete evaluation has been made by the U. S. Geological Survey, the State of Alaska, or, preferably, by private industry. This is essential if the United States of America is to maintain a strong mineral position.

2

Our main recommendations to the Department of Interior are to keep this land open for mineral exploration and development and to recognize that mineral lands may need special status and deserve protection as do other special-value lands. Since mineral deposits naturally occur where they are, we, when seeking these deposits, are compelled to search where nature has created them.

Thank you for your consideration of these matters.

Sincerely,



Richard R. Hyde

RRH:mlm

RESPONSE TO COMMENTS BY
INSPIRATION CONSOLIDATED

1. These areas are, except for the extreme headwaters of Ohio Creek, not within the proposed boundaries. As lands included within the Cooperative Planning and Management Zone, development of mineral potential existing there will not be precluded. See Chapter I, section A, for a description of the objectives of the Zone.
2. The the greatest extent possible, areas of known mineral potential have been excluded from this proposal. See discussion in Chapter III, "Impact on Mining and Mineral Entry" section, and the response to comment 24., in the USGS letter.

COMMISSIONERS:

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OTTAWA, ONT.

50th Anniversary
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INTERNATIONAL PACIFIC HALIBUT COMMISSION

ESTABLISHED BY A CONVENTION BETWEEN CANADA
AND THE UNITED STATES OF AMERICA

8 January 1974

BERNARD E. SKUD
DIRECTOR OF INVESTIGATIONS
AND COMMISSION SECRETARY

OFFICE AND LABORATORY
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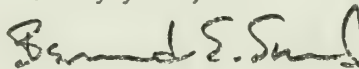
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SEATTLE, WASHINGTON 98108
TELEPHONE ME 4-1838

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

This will acknowledge receipt of the Environmental Statements in regard to the ANCSA and Wildlife refuges. I am uncertain whether your plans effect halibut fishing in the areas concerned. If the refuge regulations do not effect commercial halibut fishing, we can accept the draft report. If the plans will effect this fishery, we will have to know what specific rules or regulations are intended.

Sincerely yours,



Bernard E. Skud
Director of Investigations

THOR TOLLEFSON, CHAIRMAN
RM 115, GENERAL ADMINISTRATION BUILDING
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SEATTLE, WASHINGTON

INTERNATIONAL PACIFIC SALMON FISHERIES COMMISSION

ESTABLISHED BY CONVENTION
BETWEEN CANADA
AND THE UNITED STATES
FOR THE PROTECTION
PRESERVATION AND EXTENSION OF THE
SOCKEYE AND PINK SALMON FISHERIES
OF THE FRASER RIVER SYSTEM

A. C. COOPER
DIRECTOR

OFFICE AND LABORATORY
P.O. BOX 30
NEW WESTMINSTER, B.C.

TELEPHONE
521-3771

V3L 4X9

January 7, 1974

Mr. Theodor R. Swen
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

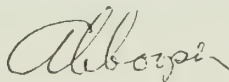
Dear Sir:

We wish to acknowledge your letter of December 28 and enclosed Draft Environmental Statements in regard to the Alaska Native Claims Settlement Act.

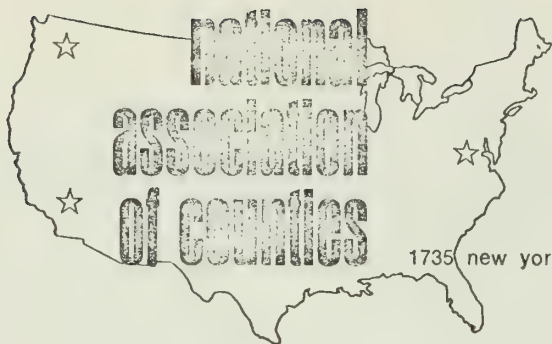
We do not believe it is within the authority of this Commission to offer comment on these particular environmental issues.

Yours very truly,

INTERNATIONAL PACIFIC SALMON
FISHERIES COMMISSION



A.C. Cooper
Director



1735 new york avenue, n.w., washington, d.c. 20006

(202) 785-9577

January 15, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U. S. Department of Interior
Washington, D. C. 20240

Dear Mr. Swem:

This is in response to your letter dated December 28, 1973 concerning the Draft Environmental Statements in regard to the Alaska Native Claims Settlement Act (ANCSA) of 1971.

We have looked over the draft and appreciate being given the opportunity to comment on it. However, we do not have enough information on the issue or the staff capacity to make a comment on the proposal. At the same time, however, it should not be assumed that our organization agrees with the draft just because we have not submitted a comment on it.

Although we will not be making comments on these drafts, we would like to continue to receive these proposals for our information. Thank you for your interest in NACo's ideas on this matter.

Sincerely,

Carol Shaskan

Carol Shaskan
Legislative Research Assistant

National Society of Professional Engineers



2029 K STREET, N. W., WASHINGTON, D. C., 20006

March 13, 1974

(202) 331-7020

OFFICE OF THE
EXECUTIVE DIRECTOR

Mr. Theodor R. Swem, Chairman
Alaska Planning Group
U. S. Department of Interior
Washington, D. C. 20240

Dear Mr. Swem:

The National Society of Professional Engineers is pleased to submit the attached comments on the Draft Environmental Statements with regard to the Alaska Native Claims Settlement Act of 1971. These were prepared in consultation with our affiliated state society, the Alaska Society of Professional Engineers.

We appreciate being given the opportunity to review these statements.

Very truly yours,

Paul H. Robbins, P.E.
Executive Director

PHR:jr
Enclosure

cc - Donald R. Dent, P.E., President,
Alaska Society of Professional Engineers
Robert L. Reitinger, P.E., President, NSPE

COMMENTS ON ALASKA
LAND RECOMMENDATIONS E.I.S. REPORTS

The National Society of Professional Engineers recognizes that our natural resources are a priceless, yet exhaustible, heritage; that the practice of sound conservation should always be the National policy; and that many of this country's natural resources have been and are being exploited and wasted because of political or economic short sightedness in their development.

Since many of these resources are both finite and irreplaceable, we believe that their conservation and development require a high degree of engineering competence in cooperation with other professional skills necessary to a sound conservation program.

It is with these premises that members of the Alaska Society of Professional Engineers reviewed the draft environmental impact statements prepared by the Alaska Planning Group.

Subjects of principal concern and which are primarily in the engineers area of expertise are; (1) transportation planning and development; (2) mineral use and development; and (3) balanced land use planning. Before commenting on specific impact statements we believe some general statements on the total proposal package should be made.

For example:

1. Either by design or accident the entire northern portion of Alaska (except for the trans-Alaska oil pipeline corridor) may be blocked from land access if all recommended areas are placed in management systems which basically oppose development of land transportation. While land transportation may prove unnecessary in future decades the subjective decision to presently prohibit or grossly restrict it in view of the gas, oil, and other mineral potential (e.g. Kobuk, Brooks Range, Naval Petroleum Reserve 4, etc.) does not appear to be in the national interest, particularly in view of recent shortages. Review of the impact statements indicate that the information developed for the statements has been gathered and interpreted by agency personnel operating from a viewpoint (except for Forest Service proposals) which basically opposes resource utilization or development. } 1
2. Most of the proposals indicate that development of any facility or any utilization of resources will require further detailed analysis and most likely a separate environmental statement. We recommend that this concern be extended to include a complete economic and resource analysis of values foregone by placement of particular recommended areas into particular systems. } 2
3. The attempt to introduce innovative ideas in various management systems is refreshing, although as proposed it is confusing and administratively questionable. In terms of mineral development in National Parks and Wildlife Refuges, for example, assurance must be given that adequate access, with feasible environmental constraints, may be developed and proposals will be given an objective analysis by administrative personnel.

4. The areas of ecological concern appear to add 80-90 million acres to the proposed 84 million acres with little apparent justification other than agency desire to manage more land. Further explanation and justification is needed to establish credibility for objective land use planning.

3

While the above comments are general concerns, we request that final impact statements address the following specifics:

Chukchi-Imuruk National Reserve - Report indicates (p. 270) that severity of climate, distance from population center, and location preclude extensive development or use of area even if not included in National Park or Wildlife Refuge. An analysis should be made objectively setting forth that climate, remoteness and inaccessibility limit tourism and recreational values and compare this with other resource uses which will be foregone.

Beaver Creek Wild River - The logic in this statement does not appear objective. Comments on page 21 recognize that life styles are changing towards a cash economy which will require rural development, yet the proposal is biased against transportation development, mineral exploration and timber harvesting and states that these necessary uses might be foreclosed (p. 68).

Kobuk Valley National Monument - Precluding hydroelectric development (p.211) and land transportation (p. 219) without a complete study and objective analysis is neither sound land use planning or in the National interest. This is especially true when the same basic philosophy is extended throughout 34 million acres of adjacent and/or nearby lands. We believe it is in the National interest to work out a more objective compromise between preservation and wise use of resource.

Stated bias against transportation development (p. 216) precludes any rational analysis of future need unjustifiably. The stated intent of the Nana Native Region to select Onion Portage appears to negate this report's most important justification thus--the withdrawal of 1.85 million acres possessing high copper, asbestos, jade and other minerals is questionable in view of mineral shortages.

Noatak National Arctic Range - Justification for the subjective time limit (20 years) prohibiting any mineral development or transportation development in a area with high mineral potential (p. 197) and geographically located in an area containing two proposed primary transportation routes (p. 191) is needed. With the energy and mineral crisis presently confronting us, placing this 7.6 million acres which is either contiguous to or nearby an additional 11.8 million acres preserved for the same purposes should be further justified. We recommend that prior to placing this area in the Refuge System an interdisciplinary team should make a detailed, objective cost-benefit analysis.

Gates of The Arctic National Park - The errata sheet states that wilderness designation is not certain; however the 278 page analysis is based on immediate wilderness designation for most of the area. Since the original Gates of The Arctic proposal (HR 1127) was for 4.1 million acres and this proposal encompasses 8.4 million acres, the objectivity and rational analysis of the proposal is questioned. We agree that there are areas of

tremendous scenic splendor in the Brooks Range which should be placed in a National Park. However, mineral values in particular should be quantified before a decision on this area is made especially since the report (p. 51) states that metallic mineral resources have not been evaluated. The report should also mention that approval of this proposal in conjunction with the Noatak, Kobuk, Selawik and Yukon Flats proposals would preclude rational development for almost all of Northern Alaska.

Yukon Charley National Rivers - This 2.3 million acre proposal contains highly mineralized areas (p. 195), a proposed major land transportation route (p. 201), and two major hydroelectric proposals (p. 193). The report recognizes (p. 202-203) that substantial increase in demand for transportation facilities will result if the proposal is implemented. For example, the report conveys the need for both conservation and use of resources (multiple use) and proposes that mining in certain areas be permitted, sport hunting with certain qualifications be permitted, etc. This rationale leads to the conclusion that the area should be placed in a multiple use system rather than be made a unit of the National Park System.

Togiak National Wildlife Refuge - From a systematic land use planning viewpoint the facts presented do little to support the conclusion. For example, it is recommended that this 2.8 million acres be withdrawn from mineral development, (p. 58 states that the area is within a major hard metal province) and future land transportation be restricted (p. 120). The justification for this action is the need for wildlife protection. However, the statistics in the wildlife section appear low in comparison with other areas (i.e. 32 ducks/sq. mi. in this proposal compared with 60 ducks/sq. mi. in the proposed Chukchi-Imuruk National Wildlands Park and 99 ducks/sq. mi. in the Yukon Flats Refuge proposal). The lowland (waterfowl) habitat is only a small portion of the whole area. For other game: caribou (non-existent p. 73), few moose (p. 74), few black bear, east of proposal (p. 74), grizzly (less than 100). We suggest that a complete inter-disciplinary economic analysis and inventory of mineral resources be completed on this area before congressional action.

Lake Clark National Park - The U.S.G.S., Bureau of Mines and Federal-State Land Use Planning Commission have all stated that the Lake Clark area has very high mineral (copper specifically) potential yet this report does not consider these assessments and prohibits mineral development, hydroelectric development and places major restrictions on future land access in an area which is critical (geographically) to future development on the entire Alaska Peninsula-Bristol Bay Area. We recommend an inter-disciplinary team prepare a complete resource (including mineral) and economic analysis on this area prior to congressional action.

National Forest Proposals - Since these proposals will be managed for multiple use we believe adequate analysis of future uses, developments, and protection can be made as the occasion arises. Our major concern in these proposals is that the recommendations for Wild and Scenic River classification appear to be made with a minimum of information. Further analysis should be made. Immediate classification, especially for wild rivers appears inconsistent with the agency's stated multiple use approach to planning.

RESPONSE TO COMMENTS BY
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

1. Effort has been made to exclude bias from the discussion in this document, in accordance with NEPA requirements and CEQ guidelines. Extension revision has been made throughout this document in response to public comment, and in this way we have further eliminated an agency viewpoint.
2. Within the limits possible, an evaluation of the economic potential lost in the enactment of any proposal will be a part of further environmental impact studies. See also the response to comment 2., Department of Commerce letter.
3. AEC's are proposed to complete scenic or ecological areas, and will not be subject to management by the NPS. See the response to comment 9., Department of Commerce letter, and the expanded discussion of the rationale for complete ecosystem protection in the "Limiting Factors and Population Dynamics" section of Chapter II.



National Wildlife Federation

1412 16TH ST., N.W., WASHINGTON, D.C. 20036

Phone: 202-483-1550

July 22, 1974

Theodor R. Swem, Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Reference is made to your letter of December 28, 1973 transmitting the Draft Environmental Impact Statement (EIS) on that part of the Alaska Native Claims Settlement Act (ANCSA) pertaining to disposition of previously-identified "17(d)(2) lands".

The National Wildlife Federation plans to comment in brief on the remaining twenty-one separate proposals for additions to existing components or establishing new units of the four national systems - wildlife refuges, parks, forests and wild and scenic rivers. The brevity of our present addressal of the proposals should not be interpreted as a lack of interest in this important action. It simply means that the Federation believes it will be afforded ample opportunity to thoroughly review each of the proposals, if it elects to do so, as they come before the Congress in public hearings during the next several years.

Before commenting on the specific proposals we would like to make some general observations and recommendations relative to many of the proposals made pursuant to paragraph 17(d)(2) of ANCSA. We note that sport hunting is to be permitted in some, but not all, elements of the National Park System. Though, in our judgment that approach signifies an enlightened move for the National Park Service (NPS), it still implies inconsistent scientific management of Alaska's bountiful wildlife resources with cropping-through hunting-used as a management tool in certain areas only.

As an organization dedicated to encouraging the management of all natural resources - especially the renewable ones such as wildlife - the Federation is firmly opposed to any plan which could limit or restrict sound wildlife management activities. We believe that professional resource managers should be given the widest possible latitude and be permitted the greatest practicable flexibility in the decisions and actions taken to enhance Alaska's wildlife resources. Therefore, the Federation recommends that scientific management of wildlife resources be implemented in all Alaskan areas intended for inclusion in the National Park System and that all decisions regarding the management tools to employ in this regard be left up to the professional managers.

We also note that subsistence hunting by the Alaskan natives will be permitted on all lands included within the proposals. While we are not opposed to subsistence uses of these lands, for we recognize the need for such uses by native villagers, we strongly urge those overseeing the individual areas to employ subsistence hunting in such a manner that it becomes a tool in the scientific management of wildlife resources.

In the interest of brevity, the Federation wishes to go on record as endorsing, in principle, the inclusion of all rivers in the Wild and Scenic Rivers System which have not been set up as separate proposals. The remainder of our comments in this letter will pertain to individual proposals.

Yukon Flats National Wildlife Refuge:

Our prime concern is for the abundant fish and wildlife resources in this area, which includes an extremely important waterfowl nesting habitat for birds from all four flyways of the North American continent. As a result of the extreme importance of this area to migratory waterfowl it is essential that this region be protected from commercial activity and environmental pollution. While the National Wildlife Federation supports this proposal in principle, we believe that insufficient waterfowl nesting areas have been included in the refuge. In our opinion the refuge should be expanded to include the remaining 0.9 million acres of wetland along the Yukon and Porcupine Rivers, which are presently included in the proposed Porcupine National Forest. The wetlands consist of flat alluvial bottomlands with low terraces crossed by meandering streams and dotted with ponds and lakes providing ideal waterfowl nesting areas. The soils are mainly deep, poorly drained silty loess and alluvium (Histic Pergelic Cryaquepts), very poorly drained fibrous peat (Pergelic Cryists) and deep, well drained loess and silty or sandy well drained loams (Typic Cryorthents). The first two soils, which predominate in the region, are easily eroded causing siltation and pollution of the streams and ponds threatening the waterfowl nesting habitat. Therefore, we believe the wetlands should be excluded from any potential commercial development. Additionally, we feel that portions of the Sheenjak River drainage, should be included in the proposed refuge to insure adequate protection of the wetlands watershed.

Porcupine National Forest:

The Federation is primarily concerned with the abundant wildlife resources located in the area. We believe that a special effort must be made in this instance to preserve and protect sensitive wildlife habitat from possibly adverse commercial development. As the proposal now stands it is unacceptable to the Federation. While we are not opposed to the establishment of a national forest, per se, we feel that the inclusion of 0.9 million acres of the Yukon and Porcupine Flats is unwise. These lowlands constitute approximately one-third of the Yukon Flats area and contribute a significant portion of the total production of waterfowl of the Flats. This area provides waterfowl nesting areas for birds from all four flyways of the North American continent. Furthermore, the soils of this area consist of Histic Pergelic Cryaquepts, Pergelic Cryists and Typic Cryorthents. The first two, which predominate in the area, are especially vulnerable to erosion which could lead to serious siltation and pollution of the rivers and ponds. Stream siltation could result in widespread destruction of waterfowl nesting habitat at the point of disturbance and downstream. Furthermore, it would be virtually impossible to prevent serious damage to, or destruction of, waterfowl nesting areas in the face of oil and gas extraction.

Wrangell Mountains-St. Elias National Park and Wrangell Mountains National Forest:

The Federation supports these two proposals in principle, recognizing the economic importance of the extractable minerals located in the proposed national forest. However,

we have serious reservations about potential adverse impacts on fish and wildlife resources from improper mineral exploration and extraction. It is essential that the U.S. Forest Service (USFS) and the National Park Service (NPS) develop a high degree of cooperation in administering the zones of complementary management to insure that the superior quality of water and wildlife resources is maintained. The Federation recommends that the national park be expanded to include 2.8 million acres of the Yakutat-Alsek coast area which comprises one of the major wildlife concentration areas along the Pacific coast for both upland and wetland species. The area also contains the primary population of glacier bear, a rare (and perhaps endangered) species. This area is presently surrounded by three proposed or existing parks, therefore its commercial development would have significant adverse impact on all three parks. The Federation would also view with favor the inclusion of 0.9 million acres of the Copper River Delta and 1.0 million acres of the Western Wrangell Mountains in the park. The Copper River Delta contains outstanding wildlife areas including breeding grounds for the trumpeter swan, the dusky Canada goose, and the Aleutian tern as well as sizable populations of brown bear, goats, and moose. Inclusion of the Western Wrangell Mountains in the park would protect critical caribou calving grounds.

Noatak National Arctic Range:

The Federation supports, in principle, the establishment of a twenty year moratorium on development in the Noatak drainage to conduct scientific studies in an undisturbed arctic ecosystem. But we feel that the present proposal is inadequate because it would divide an ecosystem into three parts. This would seriously hinder optimum scientific studies which demand an intact ecosystem in its entirety. Therefore, we believe that the proposal must be expanded to include the entire Noatak drainage which consists of an additional 1.1 million acres in the lower Noatak River Flats and Delta and 730,000 acres of the Upper Noatak watershed (currently in the proposed Gates of the Arctic National Park). The lower Noatak Flats and Delta contains wetlands which provide habitat for a great variety of waterfowl and shorebirds. The addition of this area would insure the preservation of the habitat and would allow for the study of the wetlands in relation to the rest of the ecosystem. The Federation believes that the whole ecosystem to be studied must be managed as one unit.

Iliamna National Resource Range:

Our principle concern is for the fish and wildlife resources located within the area. This proposal encompasses a very productive faunal area with a reported 135 different species of birds including the endangered peregrine falcon. Also, Lake Iliamna contains the only known population of fresh water seals in the United States. But the most important renewable resource in the area is the salmon fisheries containing as it does the largest commercial producer of salmon in the world. The Federation feels that any proposal which includes these abundant and varied fish and wildlife resources must give full and equitable consideration to commercial fisheries while properly managing the vast populations of birds and their habitat as well as protecting the fresh water seals. Also, we believe that any mineral exploration and/or extraction should be done only under the most strict environmental controls to insure the continuation of fish and wildlife, perhaps the area's most significant resource. In this regard, we must express our disappointment with the draft EIS which, in our judgment, did not adequately evaluate the adverse impacts of mineral development

on wildlife, water and vegetation. The draft EIS did not even discuss the impact of mineral exploitation on the soils of the area. Instead the statement discussed all the impacts in generalizations too broad for valid evaluation or interpretation. For example, on pages 132-3 it is stated that, "Some uses, such as roads and mining areas, will set back or keep out vegetation growth for as long as the use persists and for a number of years after the use ceases" (emphasis added). The Statement goes on to explain that since only a minor percentage of the total area will be affected, the overall impact on vegetation will not be significant. Yet these scars will be present for years and an accumulation of such "minor disturbances" could have a major impact on fish and wildlife due to loss of habitat and water pollution caused by the erosion of exposed soils. In view of the inadequacies of the draft EIS the Federation feels that a more comprehensive EIS on this proposal should be prepared before any mineral exploration or extraction begins.

Koyukuk National Wildlife Refuge:

The Federation supports this proposal in principle because of the abundant wildlife resources in the area including migratory waterfowl, moose, brown/grizzly bear, and caribou. Moreover, we feel that consideration should be given to expanding the refuge to acquire additional acreage within the Area of Ecological Concern (AEC) of the Koyukuk unit. This additional land consists of a lowland floodplain which supports approximately fifty percent of the waterfowl population of the Koyukuk Valley.

Arctic National Wildlife Refuge:

The Federation supports this proposal in principle with the understanding that the Fish and Wildlife Service (FWS) will obtain full cooperation from the Bureau of Land Management (BLM) in managing the proposed utility corridor to insure that normal caribou migration is not disrupted by a pipeline. The proposal area provides habitat for a great variety of birds including the endangered arctic peregrine falcon. Moose, dall sheep, brown/grizzly bear, and the winter range of the Porcupine caribou herd are found in this area. The Federation favors expanding the proposal to include 2.1 million acres of public interest land within the AEC. The inclusion of this land would further protect the migration routes of Alaska's largest caribou herd.

Yukon-Charley National Rivers:

The Federation supports the proposal in principle. However, we feel that any development in the area should be done in a manner that will not significantly affect fish and wildlife resources, especially the nesting grounds of the endangered peregrine falcon which are found along the bluffs of the Yukon River. Scientific management of fish and wildlife resources within the area should emphasize enhancing the habitat of the peregrine falcon. Additionally, the Federation believes the proposal should be broadened to include the entire area in which the partially gray fannin color phase of the dall sheep occurs since this is its only known location in the United States.

Harding Icefield-Kenai Fjords National Monument:

The Federation supports this proposal in principle. However, we would like to express our disappointment about the abandonment of plans to include that portion consisting

of the Pye and Chisweil Islands and the Lower Harris and Aialik Peninsulas in a proposed national wildlife refuge. We urge the NPS to give these areas careful consideration in regards to managing their wildlife resources, which include marine mammals and seabird colonies.

Gates of the Arctic National Park:

The Federation supports this proposal in principle which would allow for preservation of wildlife habitat. As we explained in our comments on the Noatak National Arctic Range, we feel that the headwaters of the Noatak River should be under the Noatak proposal.

Togiak National Wildlife Refuge:

The Federation supports this proposal in principle. The large variety and abundance of wildlife in the area easily justifies the creation of a national wildlife refuge to insure the continued viability of this renewable resource. Consideration should be given to modifying the proposal to align the seaward boundary of the proposed refuge more closely with the areas of seabird foraging.

Yukon Delta National Wildlife Refuge:

Our prime concern is for the abundant fish and wildlife resources found within this area. In keeping with the goal of establishing scientific wildlife management programs in wildlife populations, the Federation endorses this proposal in principle.

Chukchi-Imuruk National Reserve:

The Federation supports this proposal in principle with the understanding that the concepts of wildlife management described in the draft EIS will not be altered. We agree that this area contains significant cultural and archeological features which justify its inclusion in the National Park System.

Yukon-Kuskokwim National Forest:

The Federation agrees in principle with the basic proposal described in the draft EIS. We encourage the USFS to use a variety of habitat management tools to insure that the quality of the wildlife resources in the area is not diminished by other aspects of a multiple-use management program.

Cape Krusenstern National Monument:

Our prime concern is for the welfare of the fish and wildlife resources in the proposal. Hence, the Federation can support in principle the proposal to establish a national monument to preserve the outstanding cultural features of the area provided that the fish and wildlife resources are properly managed.

Katmai National Park:

The Federation recognizes the need to provide sanctuary for brown bears and to provide

protection for the natural spawning areas of the sockeye salmon. Therefore, we can agree in principle with the proposal to establish a national park to preserve this area for future generations.

Lake Clark National Park:

The Federation can support in principle this proposal as it is described in the draft EIS. We especially endorse the provision to allow sport hunting in certain sections of the park.

Mount McKinley National Park:

The Federation supports the proposed additions to Mount McKinley National Park. The additions will provide outstanding recreational opportunities, easily accessible to Alaskans by highway and railroad from Fairbanks and Anchorage.

Unalakleet National Wild River:

The Federation supports the proposal in principle. Administration as a wild river will provide remarkable outdoor recreation while preserving the primitive character of the river.

Fortymile National Wild and Scenic River:

The Federation supports this proposal in principle. Its accessibility from the Alaska Highway should encourage people traveling to Alaska from the lower forty-eight states to visit and enjoy the numerous outdoor recreation opportunities provided by this proposal.

We thank you for this opportunity to express our views.

Sincerely,


THOMAS L. KIMBALL
Executive Vice President

cc: Secretary of the Interior
Secretary of Agriculture
Chairman, Senate Interior and Insular Affairs Committee
Chairman, House Interior and Insular Affairs Committee
NWF Officers and Staff
A. W. "Bud" Boddy

The Nature Conservancy

1800 North Kent Street, Arlington, Virginia 22209
(703) 524-3151

March 18, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Please expand the NEPA process to preserve Alaskan Lands to include the preservation of biological diversity.

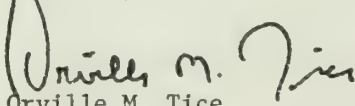
I am enclosing an excellent statement of this vital concept written by Professor E. O. Wilson for lay readers of the Harvard Magazine.

It is imperative that we have the humility to preserve natural areas for their own sake and not necessarily for our use, convenience and profit.

Alaska is our last chance to demonstrate that we have learned from the environmental disaster perpetrated in the name of growth, progress, boundless frontiers, infinite energy, etc.

Please let's develop a true stewardship ethic on behalf of our last remaining wilderness natural area. Let's value it for what it is and not what some think it should be made to be.

Sincerely,


Orville M. Tice
Director of Development

OMT/lt
Enc



The conservation of life

We are a long way from understanding all the economic, health, and aesthetic advantages of species diversity. Like latter-day Noahs, we had better work to insure the variety of earth's creatures.

by Edward O. Wilson

In a world of shrinking faith and uncertain trumpets, very few moral precepts are any longer accepted as absolute. We can nevertheless hope that one of them will be the ethic of organic diversity, which goes like this: Man must conduct himself in such a way that he adds as little as possible to the extinction rate of species on earth. Wherever he can, without seriously threatening his own welfare, he should actively reduce the extinction rate, thereby increasing the number of species that can survive in equilibrium on the globe.

Of course there have to be exceptions to this dictum. If the genus *Plasmodium* disappeared from the face of the earth, and took with it all of the agony it causes human beings and wildlife species, few people would mourn. The genus includes the parasites that cause malaria, and we are not likely to delay its extinction. In general, however, we will do well to recognize that man is the steward of the world's natural resources, the self-appointed but still profoundly ignorant steward; that the living part of the environment is still mostly unknown to him; and that he has therefore scarcely begun to conceive of the possible benefits that the world's organisms will ultimately bring in economic welfare, health, and aesthetic pleasure.

To sense the depth of man's ignorance in these matters, consider that biologists do not even know to the nearest order of magnitude how many species exist. Ten years ago the popularly accepted figure for animals was the British ecologist C. B. Williams's estimate of three million, based on extrapolations of species-abundance curves. Now some authors use the figure ten million, an order-of-magnitude conjecture advanced in the manner of physics. The reason for the upward revision is twofold. First, habitats previously thought to be barren or sparsely populated, such as the deep sea floor, have been found to contain a rich variety of organisms. Whole faunas, such as the marine annelids, abyssal benthos, and many insect taxa, are still in the earliest stages of Linnaean exploration. Second, we have discovered that a great many species exist that are very hard to distinguish, that large complexes of poorly defined sibling species are common even in the better known animal and plant groups.

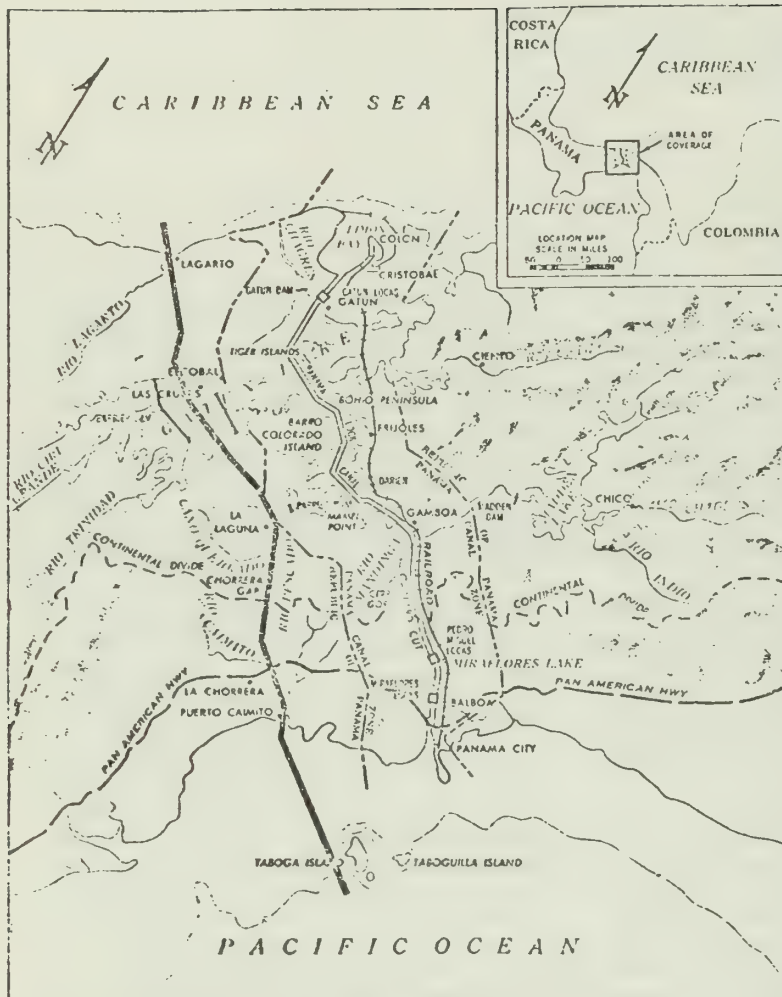
All this lack of information must be balanced by an

equal amount of caution. Our best strategy is a holding operation, by which diversity is preserved through any reasonable means until systematics, ecology, and evolutionary theory work their way up from the Stone Age toward some degree of mastery of the essential subject matter.

As an example of the worst thing that biologists might let slip by them, consider the possibility that the animal and plant life of the Atlantic and Pacific could be mingled by migration through a new Panamanian sea-level canal proposed for construction in the 1980's. The present Panama Canal is based on a series of fresh-water locks, which, by lucky circumstance, have prevented the free migration of organisms from the Atlantic to the Pacific.

Three to five million years ago the emergence of the Panama Isthmus cut the straits that connected the Pacific Ocean and Caribbean Sea, isolating the marine populations on either side. The existing ecological differences between the inshore habitats are substantial. The Atlantic coast has moderate tides, sandy beaches, mangrove swamps, and rich coral reefs. The Pacific side is characterized by strong tides, more silty water, periodic upwellings of cold nutrient-rich water, rocky shores created by extensive lava flows, and limited, depauperate coral reefs. Accelerated no doubt by such differences in the physical environment, evolution has proceeded mostly to the species level and beyond. Of the roughly 20,000 species of marine animals and plants that occur on both sides of the Panama Isthmus, perhaps no more than 10 percent are held in common. In the extreme case of the

Edward O. Wilson (opposite) is professor of zoology and curator in entomology at the Museum of Comparative Zoology at Harvard. His chief interests are biogeography and species diversity, and the social behavior of insects, particularly ants. He is the author, with R. H. MacArthur, of The Theory of Island Biogeography (1967), the original work on that subject, and of The Insect Societies (1971). An enthusiastic teacher, he gives Harvard's elementary biology course, as well as a seminar for graduate students on the feasibility of a general science of sociobiology.



The present Panama Canal consists of a series of locks, which isolate the marine populations of the Pacific Ocean and the Caribbean Sea. A new Panamanian sea-level canal, proposed for construction in the 1980's, by allowing the migration of animals and plants between the two oceans, might cause widespread species extinction. The new canal's route, recommended by the Atlantic-Pacific Interoceanic Canal Study Commission in its special report to the President, is shown here as the heavy black line running ten miles to the west of the existing canal.

fishes and mollusks, fewer than 1 percent are held in common. What would happen if free exchange of these faunas were permitted through a sea-level canal? On this point biologists have fallen into total disagreement. The following diverse opinions have been expressed in various articles, seminars, and government hearings during the past eight years:

1. There would be only a limited exchange of species, mostly from the Pacific to the Atlantic. Life in the two oceans would not be seriously disturbed.

2. The Atlantic marine biota—the ecological entity made up of all the region's animal and plant life—is richer in species and hence possesses superior competitive ability. If allowed to invade through a sea-level canal, it would cause widespread extinction in the Pacific biota. The combined extinction rates of the Pacific and Atlantic elements might reach 5,000 species.

3. The argument in 2 is based on the postulate that the greater the number of species, the greater their individual competitive ability. An alternate hypothesis, which cannot be excluded on the basis of existing knowledge, is that the greater fluctuation of the Pacific inshore environment induces the evolution of a higher proportion of opportunistic species, capable of wedging their way into existing biotas, especially within areas disturbed to some extent by man's activities. If this model is correct, and the conjecture in 2 is wrong, the flow of organisms would be predominantly from the Pacific to the Atlantic. In either case, the total impact on the two oceans cannot be predicted.

4. An exchange of biotas would be generally unpredictable and dangerous. Species could extinguish each other by excessive amounts of competition or loss of fitness through uncontrolled hybridization.

In fact, biogeographers—scientists engaged in the biological study of the geographical distribution of plants and animals—have neither the theory nor the previous experience to predict the outcome of an unimpeded exchange of faunas across a sea-level Panamanian canal. This incapacity has become increasingly clear to concerned scientists who have tried to evaluate the evidence dispassionately. Nevertheless, a strongly cautious approach seems mandatory. It is necessitated not just by the very real possibility of widespread species extinction. The introduction of only one wrong species, such as the yellow bellied sea snake from the eastern Pacific into the

Atlantic Ocean, could inflict enough economic or ecological damage to justify the attempt to prevent any migration at all.

Previous experience with the careless mixing of aquatic biotas, for example in the Great Lakes via the Erie and Welland Canals, indicates that to permit the mixing of the rich tropical Pacific and Atlantic biotas would be playing ecological roulette with all cylinders loaded. Moreover, a unique biogeographic experiment of global proportions would thereby have been performed, without adequate preparation. The natural setting for the experiment took millions of years to develop and cannot be repeated. Biology should be fully prepared before allowing it to proceed even piecemeal. For these reasons two groups of biologists—a University of Miami team supported by the Battelle Memorial Institute, and the Committee of Ecological Research for the Interoceanic Canal (CERIC) of the National Academy of Sciences—have independently recommended that some kind of biological barrier be constructed across the canal before it is opened. The barrier can take any one or a combination of several forms: bubble curtains, ultrasonic screens, intrusions of heated or fresh water, and others. The details will be a straightforward exercise in engineering, infinitely simpler than the one biologists and the rest of humanity would face if the mixing is allowed to proceed.

Biogeographers cannot predict the outcome of mixing the Pacific and Atlantic biotas, except to say that it would be dangerous, because such a prediction requires a solution to one of the most complex problems they can ever conceivably face. Similarly, molecular biologists cannot say how the tissues of man and other higher organisms develop, and behavioral biologists are unable to explain conscious thought, because these problems are also the Mount Everests of their respective disciplines. Like the rest of biology, however, biogeography is far from helpless when dealing with smaller, better circumscribed units.

A quantitative theory called island biogeography can be very helpful to us in our efforts to encourage organic diversity in the world. The most straightforward application of the theory is in the design of natural preserves. Natural habitats have always been fragmented into island-like enclaves. With certain exceptions, such as the arctic tundra, man has intensified this process, reducing the frag-

ments in size and increasing their degree of isolation. The number of species belonging to a single group, such as birds, ants, or flowering plants, that will exist in equilibrium on a given island is a function of the area and the degree of isolation of the island. When the distance to the principal source area is held constant, whether that area is a continent, a set of islands, or just a similar habitat nearby, the number of species (S) increases approximately as a simple power function of the area, as follows: $\log S = a + z \log A$, where A is the area and a and z are fitted constants. When the independent parameter of isolation is increased, a rises at a rate characteristic of each taxon and the part of the world in which the relation is observed. In most cases z falls somewhere between 0.2 and 0.4. A very rough rule of thumb is that a tenfold increase in area results in a doubling of the number of species at equilibrium.

When a nature preserve is set aside, it is destined to become an island in a sea of habitats modified by man. The species number will shift from its original equilibrium due to the area and distance effects just cited. As years pass the diversity will decline, eventually reaching a new, lower steady state. An estimate of the loss can be made by comparing the reserve with the area-species curves of older systems, providing appropriate systems exist under comparable conditions of isolation. Jared Diamond of U.C.L.A. has developed an elegant technique to estimate the relaxation rate and secondary equilibrium values in the case of island birds. He made use of land-bridge islands that were disconnected from New Guinea at known times in the recent geologic past. His results have been confirmed and extended in parallel studies in the West Indies and Central America. Researchers have discovered that significant drops in the number of species in newly disconnected islands take place over a period of decades in the smallest islands, which are comparable in area to small natural reserves on continents, and during centuries for islands comparable in size to our largest national parks. Barro Colorado Island in Panama provides an alarming example of the high potential decrement rate on small islands. B.C.I. is actually a forested hill-top that was surrounded by water fifty to sixty years ago when Lake Gatun was formed in connection with the construction of the Panama Canal. It has been a nature preserve almost since the time of its isolation. Inserting the area of the island (6.5 mi.²) and its known period of

Previous experience with the careless mixing of aquatic biotas, for example in the Great Lakes via the Erie and Welland Canals, indicates that to permit the mixing of the rich tropical Pacific and Atlantic biotas would be playing ecological roulette with all cylinders loaded.

isolation into an extinction model based on the West Indian studies. John Terborgh of Princeton University estimated that the number of resident bird species should have declined from the original 205 observed to a current fauna of 188 species, a loss of sixteen or seventeen species. This is in close agreement with the decline actually observed.

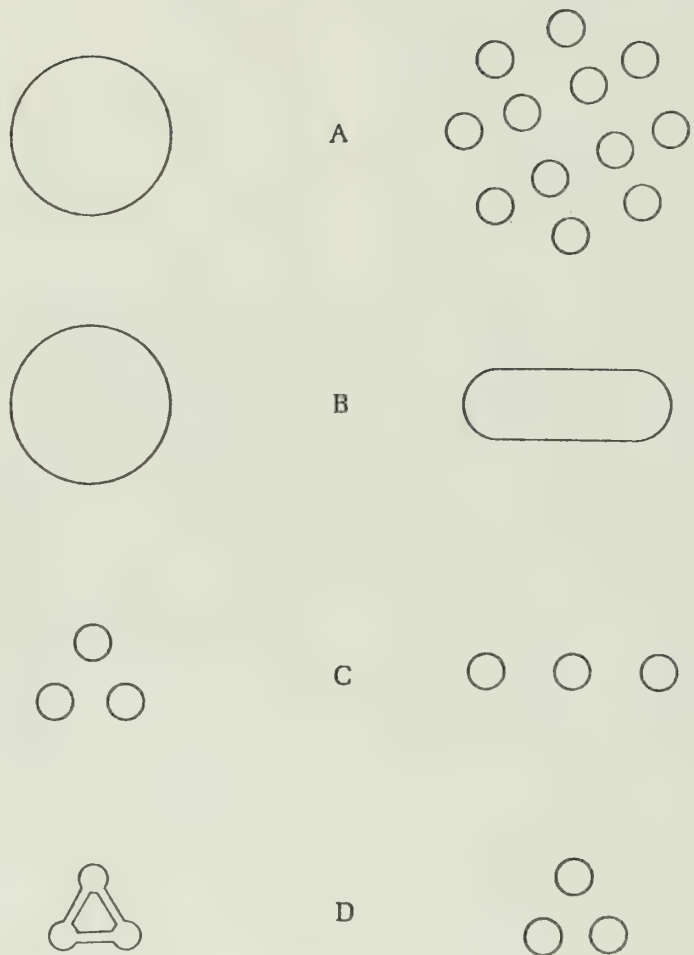
The new information from island biogeography shows that planners and managers of national parks and other natural preserves will be prudent to take the natural extinction rate into account (in addition to the man-induced extinction rate) and to choose appropriate measures to minimize it. The following basic procedures should be included:

1. Individual preserves must be made as large as possible. Since the areas of preserves will always be fixed by political compromise, estimates should be made of the extinction rates, as a function of time and area, of the most vulnerable taxa such as the birds and mammals. Then the minimal areas demanded should be the ones at which the initial and consequently highest extinction rates will be reasonably low. The projected rates should be such that only large increments of reserved land will lower them significantly further. In other words, land acquisition must reach the point of diminishing return with respect to the most extinction-prone groups.

2. Unique habitats and biotas are best contained in multiple preserves, and these isolates should be located as closely together as possible. The reason is that extinction has a strong random component. Species seldom become extinct in every part of their range simultaneously. They tend to persist because ecologically suitable localities that lose them can be recolonized from other localities that are still occupied. Reciprocal intercolonization of preserves can proceed indefinitely through time and, if aided by deliberate transplantations, might extend the life of species well beyond what it would be under natural circumstances.

3. Because biogeographers have discovered that peninsulas have fewer species than central portions of continents, preserves of a fixed area should be as round in shape and continuous as possible. (This principle and those embodied in the first two recommendations are illustrated in the diagram at right.)

4. Extinction models should not be

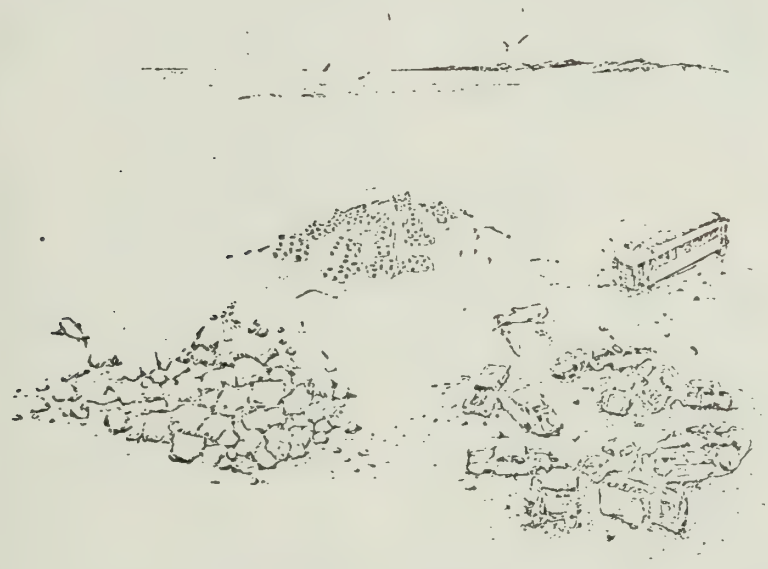


The geometrical rules of design of natural preserves, based on current biogeographic theory. The designs on the left result in each case in lower spontaneous extinction rates than the complementary ones on the right. Both the left and the right figures have the same total area and represent preserves in a homogeneous environment. A: a continuous preserve is better than a fragmented one, due to the distance and area effects. B: a round design is best, due to the peninsula effect. C: clumped fragments are better than those arranged linearly, due to the distance effect. D: if the preserve must be divided, extinction will be lower when the fragments can be connected by corridors of natural habitat, no matter how thin the corridors. Another principle, not incorporated in this figure, is that whatever the design of a given preserve, its extinction rate can be greatly lowered if similar ones are located nearby.

restricted to the most conspicuous or vulnerable organisms but should eventually be developed for all taxa. Those displaying the highest degrees of endemism and vulnerability (the two phenomena are generally correlated) deserve first attention. No group, not even the humblest and most obscure among invertebrates and microorganisms, should be ignored.

It is within the power of science not merely to hold down the rate of species extinction but to reverse it. Among the principal aspects of the ecology of communities now under intensive study is what's called the "species packing problem." In essence, the problem is the identification of those traits that allow certain sets of species, but not others, to be fitted together in the same ecosystem without markedly increasing the species extinction rate. In other

We can create wholly new biological communities where little existed before. An artificial reef in California's Santa Monica Bay, although composed of the humblest materials dumped onto the muddy bottom, greatly increased the diversity of marine life in the area.



words, how tightly can species be packed? During colonization by undisturbed biotas, congenial sets of species are gradually assembled by chance alone, raising the steady-state species number to what has been called the assortative equilibrium. Theoretically, assortative equilibria can be planned that exceed any occurring in nature. Species might even be drawn from different parts of the world—not willy-nilly, as in the careless importations of the past, but after careful ecological analysis has identified them as candidates for insertion into new faunas. Some of the first and most important introductions would surely be

"orphan species," those on the brink of extinction in their native range but capable of being fitted into certain alien communities elsewhere. I do not suggest that the state of the art is advanced enough for us to proceed with planned biotic mixing, only that species packing is one of the techniques of applied biogeography that seems likely to become practicable within the next several decades on the basis of current and projected research.

Optimism is further justified by the favorable outcome of a few biotic mixtures that have already occurred haphazardly, indicating a degree of flexibility on the part of species that will provide biogeographers with some margin for error. The Kaingaroa Forest of New Zealand, for example, contains 250,000 acres of exotic conifers, including *Pinus radiata*, *P. ponderosa*, *P. contorta*, and *Pseudotsuga taxifolia* from North America, and *Pinus nigra* from southern Europe. Introduced native birds mingle with endemic New Zealand species in this synthetic environment. Ecological differentiation is well marked; no two species have the same feeding habit, and the insectivorous birds exploit all of the major feeding niches except that of woodpeckers. The really surprising fact, however, is that some of the native species are now as abundant in the Kaingaroa Forest as in almost any native forest, and some are more abundant than in most of the remainder of their range. Furthermore, the invertebrate fauna of the forest consists mostly of native species.

Two circumstances are special in the case of the birds. First, the number of species is still small, largely because the New Zealand fauna was poorly developed to start with, and the mixed community has probably not yet met many of the difficulties in packing that would be routine in large continental faunas. Second, forest birds are differentiated to a large degree by foliage height and profile rather than by the species of trees in which they live. Certain kinds of insects that feed on only one or a few kinds of plants, particularly those specializing on hardwoods, would in most instances find it impossible to penetrate the Kaingaroa conifers. Yet the lesson is clear: what works in part by accident can be brought closer to perfection through design.

Ultimately, design might also include the artificial selection of strains, or even the creation of new species, for the purposes of biotic enrichment. If theory and experiment indicate that an orphaned species cannot be fitted into any existing communities, strains might be selected

A reading list on biological diversity and its preservation'

The following books and articles are suggested by Edward Wilson for a more extended introduction to the basic principles of ecology, especially those that relate to conservation and the preservation of diversity.

Books

Edward O. Wilson *et al.*, *Life on Earth*, Sinauer Associates, Stamford, Conn., 1973. This elementary biology textbook contains most of the fundamental ideas of modern ecology and biogeography and can serve as a stepping stone to all but the most technical reports on these subjects.

Robert H. MacArthur, *Geographical Ecology: Patterns in the Distribution of Species*, Harper and

Row, New York, 1972. A somewhat advanced but definitive textbook that explains the current status of the theory of species diversity.

David W. Ehrenfeld, *Biological Conservation*, Holt, Rinehart, and Winston, New York, 1970. A provocative and clearly written introduction to the practical aspects of the subject.

Articles

W. I. Aron and S. H. Smith, "Ship canals and aquatic ecosystems," *Science*, Volume 174, pages 13-20, 1971. A balanced review of the perils of mixing animals and plants from different oceans.

Jared M. Diamond, "Distributional ecology of New Guinea birds," *Science*, Volume 179, pages 759-769, 1973. Describes the method by which the natural extinction rate on islands and other isolated preserves can be estimated.

same laws of biogeography governing wholly natural islands. The communities are not likely to be as diverse as those that have evolved for millions of years in the natural islands, yet the process of enrichment can be speeded by the deliberate importation of compatible species to reach new and higher assortative equilibria, to create intricate, fascinating new communities. This is another aspect of biogeographic technology that ongoing basic research might render practicable during the next few decades.

The greatest misfortune that awaits the human intellect is to be no longer faced with something commensurate with its capacity for wonder. If the golden age of science really ends, and research shrinks to a few remote and arcane frontiers accessible only to specialists, the wonder will indeed be gone. By that time even the pre-scientific myths that sustained our ancestors, and intrigue us still, would have largely evaporated—having been accounted for in full, perhaps by the right kind of neurophysiological analysis of the limbic system and hypothalamus.

But this exhaustion of the wonderful will not occur during the lifetime of anyone now living. The ultimate complexity, offering an unexplored terrain of virtually infinite extent, lies in biology. Even after the cell has been torn down and put together again, and the labyrinthine mysteries of tissue development followed to their ends, there lie ahead the much more extensive challenges of ecology and biogeography. The full exploration of organic diversity is a prospect that suits the biocentric human brain, especially those emotive centers that evolved to make us superior hunters and agriculturists. The same instincts that motivate the bird watcher, the butterfly collector, and the backyard gardener can indefinitely sustain the scientifically curious segment of a more sophisticated human population in the pursuits of ecology and biogeography.

The most interesting part of the universe is right here. We have a biotic planet, and the chances of finding another one within scores of light years are remote indeed. A biotic planet, with millions of species on it, is an infinitely more interesting puzzle than any number of lifeless planets. And the possibilities of ecosystems manipulation confront us with mysteries that only generations more of study and creative work can solve. □

within captive populations of that species and eventually inserted into one or more existing communities. I do not seriously suggest that such a procedure will be followed in the foreseeable future for any but a very few of the organisms most valued by man. Furthermore, the genetic molding of communities is a technology that cannot be seriously contemplated until the inchoate discipline of population ecology has moved closer to a full solution of the species packing problem.

Many of the earth's major habitats are biological deserts: the open sea, the ice caps, some of the trace-element barrens, and the real deserts, the extremes of which are virtually lifeless. Quite by coincidence, technology is at this moment driving toward two major goals that could transform these areas: an unlimited or at least vastly greater source of energy, and, as one of the principal benefits of the first, the cheap desalinization of sea water. With the achievement of these goals, men will move increasingly onto the land deserts, carrying communities of organisms with them. One may hope that we will not be

satisfied with limiting ourselves to a baggage of domestic animals, houseplants, pests, and commensals. It lies easily within our power to create wholly new parks and reserves where nothing existed before in historical times. But what will go into these *de novo* communities? Thought about this subject sharpens one's vision of the future of applied biogeography.

In fact, the deliberate creation of new biological communities has already begun. Large areas of desert-like barrens in Australia have been transformed into agricultural land by the simple addition of zinc, copper, and molybdenum, "trace" elements required for life that were previously present in abnormally low quantities. Marine biologists have discovered that artificial reefs, with rich complements of reef organisms, can be created just by dumping concrete rubble, abandoned automobiles, used automobile tires, and similar inert refuse onto the mud or sand floors of shallow marine waters. Successful experiments of this nature have been conducted off the shores of Florida and California.

What these efforts engender are in

NORTHWESTERN UNIVERSITY

EVANSTON, ILLINOIS 60201

PUBLIC LANDS PROJECT

2040 SHERRIDAN ROAD
EVANSTON, ILLINOIS 60201
TELEPHONE (312) 492-3559

July 17, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem,

We have reviewed the following draft environmental impact statements prepared by the Department under the Alaska Native Claims Settlement Act:

Iliamna National Resource Range;
Mount McKinley National Park;
Yukon Delta National Wildlife Refuge;
Katmai National Park;
Koyukuk National Wildlife Refuge;
Cape Krusenstern National Monument;
Togiak National Wildlife Refuge;
Noatak National Ecological Range;
Selawik National Wildlife Refuge;
Kobuk Valley National Monument;
Lake Clark National Park;
Alaska Coastal National Wildlife Refuge.

We do not have specific comments to make on these individual draft impact statements. This letter constitutes neither support for nor opposition to the proposals, as described in the DEIS's.

We do have two, general comments on these proposals:

(1) Subsistence hunting use of the designated areas by Alaskan Natives should be allowed even when no longer necessary for human survival to preserve cultural traditions, and a valued way of life;

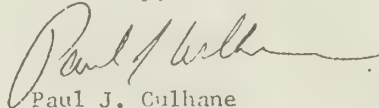
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(2) Areas of Ecological Concern should be included within boundaries of the designated areas, if these AEC's are not selected by Native Corporations as "deficiency lands; these areas may properly be included because the present withdrawals included the lands withdrawn for Ramparts Dam, and this prior withdrawal should not count towards the Secretary's 80 million acre limitation.

2

We wish to receive a copy of the Final Environmental Impact Statement for each of the above-mentioned Proposals.

Sincerely,


Paul J. Culhane

PJC/jm

431

RESPONSE TO COMMENTS BY
NORTHWESTERN UNIVERSITY, PUBLIC LANDS PROJECT

1. The provision for continued subsistence activities has been revised to reflect that existing traditional subsistence uses of renewable resources will be permitted until it is demonstrated by the Secretary that utilization of these resources is no longer economically or physically necessary to maintain human life nor is no longer necessary to provide opportunities for the survival of Alaskan cultures centering on subsistence as a way of life. This is discussed more fully in Chapter I.A.
2. No action on the AEC's are proposed in this action. The purposes of these areas are discussed in the response to comment 9., Department of Commerce letter. The Secretary in the future could recommend the inclusion of the AEC's into the park.

Saguaro Ecology Club

6250 82nd Street
Scottsdale, Arizona
85253

Please reply to:
4725 N. 70th St.
Scottsdale, Az. 85251

June 1, 1974

Theodor R. Swen
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington D.C. 20240

Dear Sir:

The Saguaro Ecology Club supports the fine proposals for adding 3.18 million acres to Mount McKinley National Park. These additions will help protect the superb natural values of this truly great National Park. We have just two comments on the draft Environmental Impact Statement:

- 1) The EIS should analyze the impacts of the 1972 transfer of lands south of the Park to the State, and the possibility of adding such lands to the Park.] 1
- 2) The possible impacts of omitting Chelatna Lake from the Park should be examined.] 2

Thank you for receiving our comments.

Sincerely,

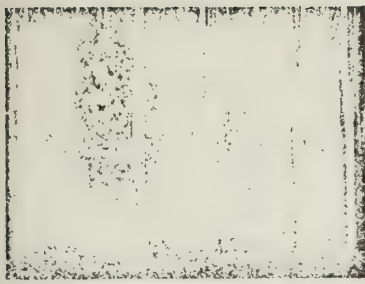
Tom Wright

Tom Wright



RESPONSE TO COMMENTS BY
SAGUARO ECOLOGY CLUB

1. & 2. This document is designed to analyze impacts of this proposal on the surrounding environment, and cannot be extended to include impacts which are not a result of this action. Alternatives B-9 and B-14 specifically address the possibility of including these lands, and in doing so discuss the associated environmental impacts.



SIERRA CLUB

Mills Tower, San Francisco 94104

by Ansel Adams in *This is the American Earth*

July 18, 1974

Mr. Theodore Swem
Chairman, Alaska Planning Group
Department of the Interior
Interior Building
Washington, D.C. 20240

Dear Mr. Swem:

Enclosed with this letter are the comments of the Sierra Club on the draft EIS's of the Department of the Interior on the following proposals in the State of Alaska:

Gates of the Arctic National Park
Cape Krusenstern National Park
Katmai National Park
Harding Icefield-Kenai Fjords National Monument
Lake Clark National Park
Mt. McKinley National Park (extensions)
Wrangell-St. Elias National Park and
Wrangell Mountains National Forest
Yukon-Charley National Rivers
Fortymile National Wild and Scenic Rivers
Chukchi-Imuruk National Reserve
Yukon Flats National Wildlife Refuge and
Porcupine National Forest
Arctic National Wildlife Refuge
Yukon-Kuskokwim National Forest
Koyukuk National Wildlife Refuge
Yukon Delta National Wildlife Refuge
Noatak National Arctic Range
Iliamna National Resource Range
Togiak National Refuge

The Club would appreciate inclusion of these comments in the Record.

Sincerely,

Edgar Wayburn, M.D.
Chairman, Alaska Task Force

MT. MCKINLEY NATIONAL PARK (EXTENSIONS)

Pages 1-17, description of the proposal. A primary goal of the National Park System is the preservation of representative biotic units or ecosystems; in McKinley's case a representative transect of the Alaska Range from the lowlands of the south slope, across the culmination of the entire Alaska Range, and out onto the boreal forests of the interior. This traditional (and scientifically desirable) NPS objective is ignored in the first section of the draft because the Interior Department, as a result of an earlier political decision, turned the bulk of the south slope lowlands--previously withdrawn as d-2--over to the state.

There is no other area in the Alaska Range where a cross-section is proposed for NPS jurisdiction. In the eastern Alaska Range, north of the Wrangell Mountains, Interior was obliged to yield jurisdiction to the U.S. Forest Service. And to the west, where the range merges with the Aleutian Range, there is no opportunity for perserving a representative cross-section.

According to the draft E.I.S., only five percent of the 1.6 million acre south addition is forested, and "roughly 10 percent" is alpine tundra, making 85% of the addition icefield, glacier and barren rock. This proportion is comparable to that in the proposed Wrangell-St. Elias National Park, where the NPS estimates 88% of the 8.64 million acres is barren rock and ice. Accordingly, the final E.I.S. should address the environmental impact on the lands involved of relinquishing the south slope lowlands to the state of Alaska.

As part of their out-of-court settlement of September 1972, the state and federal administrations agreed to prepare a

cooperative management plan for the Chelatna Lake townships. This agreement is not in S. 2917 of January 30, 1974. What planning is contemplated for the Lake Chelatna area now? If none, what are the potential adverse environmental impacts, based on a continuation of present trends in that area?

Page 2. What is the interim management policy for the .5 million acre of d-1 in the north addition? Will this acreage be open to location under the 1872 Mining Law pending congressional action? Is this consistent with the intent of Congress as expressed in section 17 (d) (2) of ANCSA? Have the Interior Committees been consulted by the Interior Department on this issue?

Page 5: what is meant by "exclusive jurisdiction"? Legislative, proprietary, and concurrent jurisdictions should be noted and explained.

Pages 16 ff: areas of ecological concern. Why is not more of the foothill zone on the south side of McKinley treated as an area of ecological concern? More of the upper Tonsona River? What biological criteria were used in identifying the area of ecological concern? What political criteria? For lands within the areas of ecological concern not selected by the state, why is there no provision for the Interior Department to recommend that these lands be added to the park?

Pages 17 ff: cooperative planning zone. Why is the Talkeetna area left out of this zone? Park plans by the Matanuska-Susitna Borough and state Division of Parks plans for Denali State Park should be discussed and the NPS plans related to them.

Pages 19-26, land status. In order for the Congress and the people of this nation to fully understand the proposal,

the section on land status must be expanded to include a complete history of land status changes and park addition proposals beginning in 1969. This account should include a discussion of the terms of the out-of-court settlement reached in September 1972 by the Egan and Nixon administrations, with specific reference to the Mt. McKinley withdrawals. The account should be keyed to maps showing the:

a) proposed withdrawal by then Interior Secretary Udall for addition to the park, circa January 1969;

b) subsequent agreement with the Keith Miller (state) administration for a southern extension reduced in size;

c) land status in the Mt. McKinley region on the date of enactment of ANCSA;

d) land status in January 1972 following state selections;

e) land status in March 1972 following Interior's initial 17 (d) (2) and (d) (1) withdrawals;

f) land status in September 1972 following the second 17 (d) (2) and (d) (1) withdrawals;

g) land status in December 1973 as proposed in S. 2917 of January 30, 1974.

Pages 158 ff, alternatives to the proposed action. One alternative that is overlooked which should be included in the final E.I.S. is the addition to the proposal of the lands described in alternatives 8 (upper Tonzona River drainage), 10 (Collinsville, Lake Chelatna, et al.), 12 (unselected Native withdrawal), and 13 (Golden Zone and Broad Pass), with management of these lands under a national recreational area

classification. As outlined in the draft, the alternatives assume an either-or position for the lands described in the above alternatives: either national park status, with all incompatible uses excluded, or non-NPS jurisdiction and multiple use as envisioned in the cooperative planning zone.

Under national recreational area status, regulated sport hunting could take place, as well as carefully-controlled mineral extraction. Mineralized zones on federal lands on the south side of the Alaska Range are not justification, in themselves, for disposing of these key park threshold lands into non-federal ownership.

Pages 41, 175. Contradictory statements are made regarding state plans for the Healy-Stampede winter trail. This should be clarified. Is this trail within the present d-2 at any point?

Pages 191-201. Alternatives 12 and 13 should include more emphasis on the critical habitat for caribou these alternatives would protect. It is a post-calving summering area of the McKinley herd (Hemming, 1970).

Pages 144, 149. This discussion of the desirability of "multiple use" for the federal lands excluded from the park proposal should be balanced with an analysis of the scenic, recreational, and biological resources of this area.

On the one hand, pages 81 and 144, it is stated that the mineralized belt south of the existing park has an "estimated potential" of producing \$360 million in minerals. On the other hand it is stated (p. 81) that past production figures from the zone are unknown. What is the source of the "estimated potential"?

8

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Page 202. Another alternative which should be included in the final E.I.S., mapped, and its impact analyzed is that found in S. 2918 of January 30, 1974.

12

RESPONSE TO COMMENTS BY
SIERRA CLUB

1. This EIS is designed to discuss the impacts which are created by the enactment of this proposal. Accordingly, it is beyond the scope of this document to discuss impacts of particular areas which are not included in the proposal area. The Lake Chelatna area is included in the Cooperative Planning and Management Zone, which is designed to alleviate impacts on the Zone itself and the adjacent park through cooperation and consultation between the landowning agencies involved. Inclusion of this area into the park is considered in alternatives B-9, B-10, B-14 and B-15.

2. Interim management of these d(1) lands is by the Bureau of Land Management. They are open to mineral entry under the 1972 Mining Law.

3. Exclusive Jurisdiction: In areas with exclusive jurisdiction, the Federal government alone has authority to establish or enforce federal laws and regulations. State laws are not applicable and cannot be enforced by State law enforcement officials within the area. Exclusive jurisdiction requires a specific granting action by the State except for Mount McKinley National Park where exclusive jurisdiction (with certain excepted) provisions) was retained by the Federal government when the State was established.

Concurrent Jurisdiction: In areas with concurrent jurisdiction laws of both Federal and State governments are applicable and each may enforce its laws and may try an accused for violation of its laws. Concurrent jurisdiction would require a special action by the State legislature to give such authority back to the Federal government.

Proprietary Jurisdiction: In areas with proprietary jurisdiction State laws apply and may be enforced by State law officials. The Federal government may establish and enforce Federal law and regulations. However, Federal employees cannot enforce State laws and State enforcement officials cannot enforce Federal laws and regulations.

4. Lands to be included within AEC's, as well as lands to be included in the proposed extensions, have been selected after a careful consideration of the benefits gained and/or lost by such action. These "trade-offs" have resulted in the exclusion of some areas of possible park potential, but with high mineral or other resource potential.

5. Talkeetna was thought to be too distant from the proposed park boundary to be considered a foreground area. Consultation is ongoing and will continue with the Matanuska-Susitna Borough in the management of parklands adjacent to that area. The State of Alaska has indicated in their letter, this chapter, that the proposed southern extension would provide a protected foreground for viewing Mt. McKinley from Denali State Park.
6. The land status discussed in the text reflects that of the time of the printing of the DEIS. Recent changes are included in the revised land status map in this document.
7. This alternative was considered and not included in this statement for the reasons previously given in response to a comment by the Fairbanks Environmental Center, this chapter.
8. Reference to State plans for the development of this trail has been deleted from the text. It passes through d(2) land in the Stampede area. This route has the status of proposed transportation corridor, for which final modal decisions have not been made.
9. This information has been added to the text.
10. The discussion of multiple use is written in as an objective a manner as possible, in accordance with NEPA and CEA guidelines. It is thought that the scenic, recreational, and biologic value of the area is adequately represented in the text of this document.
11. The source is USGS Open File Report 546, 1972. Bibliographic reference has been added to the text.
12. This alternative has been added to the Final EIS as alternative B-5 in Chapter VIII.

DOR INLET CHAPTER
JUNEAU CHAPTER
ETCHIKAN CHAPTER
JKON RIVER CHAPTER

SOCIETY OF AMERICAN FORESTERS

Alaska Section
Juneau Chapter
P.O. Box 1305
Juneau, Alaska 99801



May 28, 1974

Mr. Theodor R. Swen
Chairman, Alaska Planning Group
U.S. Department of Interior
Washington, D.C.

Subj: Env. Impact St.
Secretarial Proposals
for Land Withdrawals

Dear Mr. Swen:

Members of the Juneau Chapter of the Society of American Foresters, being knowledgeable in the field of land management and Alaska in general, have reviewed the subject proposal. Following thorough discussion, the Chapter on April 22 resolved as follows:

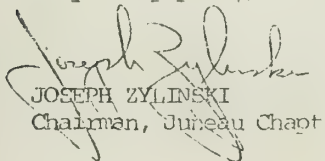
WHEREAS many of the environmental statements for Alaska land withdrawals: (1) eliminate large areas of forest lands from multiple use management by inclusion in proposed parks, monuments and refuges, (2) unnecessarily eliminate mining, one of the traditional multiple uses where adequate safeguards could be included in legislation, (3) disregard results of hearings held by the Joint Federal-State Land Use Planning Commission which preceded release of the Department of Interior's proposals for parks, monuments and refuges, thus denying this Society from public input, (4) preclude access to and through withdrawals and thus deny the best use of adjacent State, Federal, Native and private lands for their most productive use.

NOW THEREFORE BE IT RESOLVED that the Juneau Chapter of the Society of American Foresters urges the Secretary of the Department of Interior to reassess and amend the proposals and the environmental statements to provide for the above mentioned deficiencies.

We request that the above statement be added to all proposals.

Adopted May 22, 1974.

Very truly yours,


JOSEPH ZYLINSKI
Chairman, Juneau Chapt

COOK INLET CHAPTER
JNEAU CHAPTER
ETCHIKAN CHAPTER
UKON RIVER CHAPTER

SOCIETY OF AMERICAN FORESTERS

Alaska Section
333 Madison
Ketchikan, Alaska 99901



June 13, 1974

Mr. Theodor R. Swem, Chairman
Alaska Planning Group
U. S. Department of Interior
Washington, D. C. 20240

Dear Mr. Swem:

The Alaska Section of the Society of American Foresters, representing more than 150 forestry professionals throughout the State of Alaska, is keenly aware of the many important contributions that forest resources can make to the material, social, and spiritual well-being of the nation and the State of Alaska. These contributions are determined in large measure by the objectives, policies, and means of the forest landowners, whether the landowner is the public, shareholders of a corporation, or individuals. The Alaska Section of the Society is especially interested in the Draft Environmental Statements on the Secretary's Proposals for land withdrawals under the Alaska Native Claims Settlement Act of 1971, since basic objectives and policies for much forest land owned by the public is proposed. These objectives and policies will have substantial effect on the quality, quantity, and variety of outputs provided by forest land managed under the proposed withdrawals and will play a key role in guiding prescriptions by forestry professionals of practices necessary to achieve such goals and objectives.

Forest lands normally provide the largest net sum benefits to society when managed for multiple use. Multiple use is a strategy of deliberate land management for two or more purposes which utilizes, without impairment, the capabilities of the land to meet different demands simultaneously. Uses of forest lands should be skillfully coordinated unless there is demonstrable need for exclusive use. Establishing priorities of land use is valuable procedure in the multiple-use management of forest lands, especially where land-use conflicts may occur. Land use priorities should be based on the objectives and needs of the landowner, reviewed periodically and, where necessary, changed to reflect changing conditions of resources and changing needs of people.

The Section finds that many of the proposals for these land withdrawals eliminate large areas of forest lands from multiple use management by inclusion in proposed parks, monuments, and refuges, unnecessarily eliminate mining, one of the traditional multiple uses where adequate safeguards could be included in legislation, and preclude access to and through withdrawals which would deny the most productive use of adjacent State, Federal, Native, and private lands.

BOOK INLET CHAPTER
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SOCIETY OF AMERICAN FORESTERS

Alaska Section



With the above thoughts in mind, the Alaska Section of the Society of American Foresters requests that this general statement be included as part of the comments on each proposal.

I have enclosed specific comments which should become a part of the review of individual proposals.

Sincerely,

Magnus E. Chelstad

MAGNUS E. CHELSTAD
Chairman

Enclosure

SOCIETY OF AMERICAN FORESTERS

Alaska Section



Specific Comments:

1. There is little attention paid in any of the Statements to Alaska's contribution to National or world-wide supply of natural resources. What will be the division of resources between Federal, State, and Private if all of these proposals are implemented? This impact on the social and economic environment has not been adequately considered.

2. Except in rare or unique situations, management for less than all of the values of forest and related environments is not wise use and is contrary to good conservation practice. We fully recognize the opportunities for outstanding National Parks and Refuges in many places in Alaska. At the same time, creation of units in the National Park System and National Wildlife Refuge Systems in lands best suited management for a combination of uses is a questionable pursuit. Perhaps one of the reasons multiple use management is not considered in a better light is because of the inadequate and often totally erroneous descriptions given in some of the alternative sections. Multiple use, practiced by professionals of various disciplines, does not result in serious environmental degradation. Better representation of multiple use and its impacts should be given, particularly in the Aniakchak Caldera, Mt. McKinley, Katmai, Kobuk, Gates of the Arctic, Chukchi-Imuruk, Yukon Delta, Alaska Coastal, Togiak, and Iliamna proposals.

3. The Yukon-Charley National Riverway proposal does not recognize nor give proper weight to the variety of resources available. At the same time, the historic and cultural values, while important, seem to be exaggerated. Timber and agriculture resources are not accurately portrayed. Timber volumes, according to U. S. Forest Service, is near one billion bd. feet. The Soil Conservation Service reports areas of real crop land and grazing potential.

The development of hydropower is not properly discussed. The effect of the proposal on mineral extraction does not indicate the full extent of restriction and probable result under National Park administration. The opportunity to develop wildlife habitat might be restricted and this lost opportunity is not discussed.

4. The Lake Clark proposal does not adequately portray the diversity of resources of this area. Only the scenic values are adequately described. Sport hunting and other wildlife values, mineral potential and timber potential are underplayed. Current timber surveys by USFS and BLM indicate 74 million cubic feet of forest resources in the area. The emphasis on the importance of the proposal in protection of water quality by preventing mining and road building does not square with Federal and State water quality control laws applicable to all jurisdictions, and fails to relate the already high turbidity and sedimentation of the glacier-fed rivers and streams.

SOCIETY OF AMERICAN FORESTERS

Alaska Section



5. The volume of timber in the Koyukuk proposal is not known precisely. Consideration of this resource should be related to the entire region rather than to the proposal area. Sustained yield of timber resources relies on policies which maintain the largest inventory to permit rotations throughout a broad region. Withdrawal of availability puts additional pressures on other areas and could well mean the difference between an economic and environmentally sound program in the total region. This area should be managed under authorities to manage and utilize the renewable resources with proper safeguards for wildlife values.

6. The Yukon Flats region contains one of the most significant stands of interior forest. It is a major habitat for nesting waterfowl. It is a known oil and gas province of promise. As discussed in the Koyukuk proposal, the long-term effects on the total Alaskan environment can be affected by the amount of resources available for utilization. In the Yukon Flats proposal, waterfowl protection and utilization of wood products need not be mutually exclusive. Authorities should be included and considered which will foster the conservation of wood fiber resource in concert with all other sources of wood in the upper Yukon Valley in all ownerships. Although the harvesting of timber is permissible on refuges, it is not an active program. Good land management should provide for wide use of all resources compatible with the area's primary values.

7. The proposal to place the extensive Fortymile River system into a Federal reserve system without also including its total watershed in a reserve system does not seem logical. The Wild and Scenic proposal should provide for protection and management of all of the watershed under authorities as permanent as the River itself.

8. The Porcupine National Forest proposal states as major management emphasis "development of . . . measures which will lead to sustained yield forest management on this unit and adjacent ownerships". This is an admirable goal, but no details are given on how this may be achieved. In fact, in view of statements made in the Yukon Flats National Wildlife Refuge proposal, it seems unlikely this goal can be achieved.

9. The Yukon Kuskokwim National Forest proposal brings a long-range conservation philosophy to a region which might not otherwise enjoy an overriding objective of environmental quality. Although seen as decades away, integrated management of this area for its various resources should serve as a stabilizing influence for regional development. We are pleased the Secretary has recognized that large areas of lands with combinations of resources are of national interest as well as areas with dominant scenic or wildlife features.

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Alaska Section



10. Major management emphasis for the Wrangell Mountains National Forest proposal omits any mention of forest management. Protection and maintenance of scenic forests through advanced forestry measures may be one of the more important actions to augment the recreation resources of the area. Also, the contributions of timber from the Upper Tanana Valley within the proposal will help alleviate pressures to overcut timber on State and Private lands elsewhere. We should hope that the practice of forestry will continue on this National Forest proposal.

COOK INLET CHAPTER
JUNEAU CHAPTER
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YUKON RIVER CHAPTER

SOCIETY OF AMERICAN FORESTERS

Alaska Section
Sitka Chapter
P.O. Box 850
Sitka, Alaska 99835



Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of Interior
Washington, D. C.

Dear Mr. Swem:

Members of the Sitka Chapter of the Society of American Foresters would like to add their support to the resolution you recently received from the Juneau Chapter of the Society of American Foresters.

We urge the Secretary of the Department of Interior to reassess and amend the proposals and the environmental statements to provide for the deficiencies mentioned in their resolution.

A copy of their resolution is attached for your information.

Sincerely yours,

A handwritten signature in cursive script, which appears to read "Alan J. Aitken".

Alan J. Aitken
Chairman, Sitka Chapter

RESPONSE TO COMMENTS BY
SOCIETY OF AMERICAN FORESTERS

1. This statement identifies and evaluates the known resources of commercial potential in the proposal area, but does not attempt to compare them to world or National supplies of the same commodities. Such an analysis is beyond the responsibility of this document. Areas outside the proposal boundaries are not evaluated for resource potential, as this is also beyond the scope of this EIS. A map showing the land status of all withdrawals subsequent to ANCSA, 1971, is available and, with additional resource data available from various agencies making such evaluations, a picture of overall resource distribution--Federal, State, and private--can be gained.
2. A revised definition can expanded discussion of the multiple use alternative have been included in this text in order to more objectively analyze this management type.



UNIVERSITY OF ALASKA
FAIRBANKS, ALASKA 99701

January 11, 1974

Mr. Theodor. R. Swem
Chairman, Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

Thank you for including us in the distribution of draft environmental statements under the Alaska Native Claims Settlement Act. We are extremely interested in the activities of your group and the actions relating to d-2 areas, and we look forward to receipt of further reports and related information.

The institute cannot, of course, take a position as to whether an environmental statement does or does not adequately examine the issues. However, as individuals, our staff will certainly provide what assistance we can. The extent to which this will be done depends primarily on the interests, knowledge, and time of individual staff members. Subject to these constraints, we will do what we can to review the draft statements and provide technical comments, primarily in the area of socioeconomic impacts. It would, by the way, be useful to know exactly how deep and extensive an analysis is required, and if you have any appropriate guidelines, we would greatly appreciate receiving them.

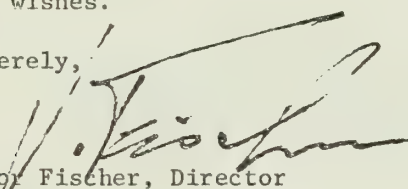
I can give you two general comments at this time, and these are strictly personal. First, the draft analyses of socioeconomic impacts that I have looked at seem rather vague and weak. Second, and this is extremely important, the impact statements essentially view each proposal in isolation from other proposals, and from other major land actions in the region, including state and Native selections. It is doubtful that a piecemeal approach can provide the basis for evaluating total impacts, either in terms of regional, statewide, or national perspectives. I make these comments now, as they apply to the total set of proposals and will not be reflected in individual statement reviews.

1
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In any case, we will do what we can to provide you with useful comments. We have, of course, provided much information and individual assistance to agencies working on the statements. This we are continuing to do, and if we can be of any service to your group beyond the reviews, please let us know.

Best wishes.

Sincerely,



Victor Fischer, Director
Institute of Social, Economic
and Government Research

VF:jd

RESPONSE TO COMMENTS BY
UNIVERSITY OF ALASKA

1. Based on comments from the public and governmental agencies, and on additional and more recent information, the section dealing with the socioeconomic impacts of this proposal have been extensively revised and expanded. It is hoped that this very important subject is now adequately addressed in this Final EIS.
2. A consideration of this proposal, along with those proposals of other actions resulting from ANCSA, 1971, and a consideration of them as a joint action, will provide the most complete and detailed description of the total impact of all the actions. For a more complete discussion of this subject, see the response to comment 1. of the USFS letter, this chapter.

UNIVERSITY OF ALASKA
FAIRBANKS, ALASKA 99701

February 15, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Biologists on our staff favor caution in development of access to areas of Alaska that are still largely in their natural state. We have no special expertise in the general economical or social uses of the proposed areas of withdrawal. Individuals in our staff are acquainted through biological studies with the animal and plant life and people of many of the areas proposed for withdrawal. Our future program will involve studies of the animals, plants and people of Alaska. In these we will be joined, as in the past, by colleagues of national and international institutions for research and with associates in state and federal agencies concerned with management of natural resources. Through the knowledge of its resident staff the Institute of Arctic Biology has become a center through which national and international scientists carry out studies of the Alaskan biological environment.

We note with interest a proposal that facilitation of better scientific information is regarded of importance in the statements on impact of the withdrawals. The statements prepared by Interior outline rather well the known aspects of biological information in the several areas proposed for withdrawal. These statements also indicate that information about the several biological environments is still insufficient for management and by no means shows the full value for public interest and use of the animals and plants in the diverse environments. For Alaska and the nation it is important to intensify studies of life in Alaska, which contains a vast store of still unknown biology applicable to practical and theoretical developments as well as being of exciting interest for popular education.

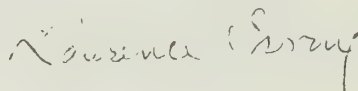
We presume, although it is not expressly stated, that the very knowledgeable personnel of the Alaska Department of Fish and Game have been consulted with regard to the impact statements. It would be desirable to utilize their knowledge, experience and devoted interest as residents in effective manner in a combination of federal and state planning and management. That bureaucratic procedures have made these combinations difficult to implement should be no obstacle to devising a reasonable cooperation.

In fact, very vociferous and realistic objections to large federal withdrawals in Alaska will come from the possibly adverse impact upon the state's government by sequestrations under non-resident management. Unless concord with the people and government of the State of Alaska is carefully prepared, hearings on the proposed withdrawals are sure to be disturbed by arguments in which federal bureaus, state government and citizen organizations appear as adversaries. They should, of course, appear as collaborators in fact and principle.

INSTITUTE OF ARCTIC BIOLOGY

The biologists of this Institute will carefully observe the deliberations on the impact statements. Individuals among us who have special scientific knowledge of the life in an area proposed for withdrawal will offer their opinions as individual scientific testimony where appropriate. The Institute of Arctic Biology is ready to serve the Department of the Interior in fact-finding studies if such studies should be requested from the University of Alaska.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Laurence Irving".

LAURENCE IRVING
Advisory Scientific Director
& Professor of Zoophysiology

LI:hw

RESPONSE TO COMMENTS BY
UNIVERSITY OF ALASKA ARCTIC BIOLOGY

1. As stated in the text of this statement, it is the intention of the NPS to continue studies on the environmental factors of this region in order to facilitate the management of it to the greatest benefit to both the land and its users. Information from ADF&G was used in the development of the Draft EIS, and extensive revision based on comments contained in the State of Alaska letter, this chapter, has been made in this Final EIS. Cooperation with the ADF&G, the Institute of Arctic Biology, and other scientific and technical agencies will be actively sought in the study of the environment of the park area.

C.U. Wilderness
Study Group
U.M.C. 188
University of Colorado
Boulder, Colo. 80302
June 1, 1974

Mr. Theodor Swem
Chairman, Alaska Planning Group
U.S. Dept. of the Interior
Washington, D.C. 20240

Dear Mr. Swem,

I have read and examined in great detail the draft Environmental Impact Statement for the Mt. McKinley National Park additions. Although our group is primarily concerned with Colorado Wilderness, we feel that this is an important opportunity to help preserve these beautiful lands.

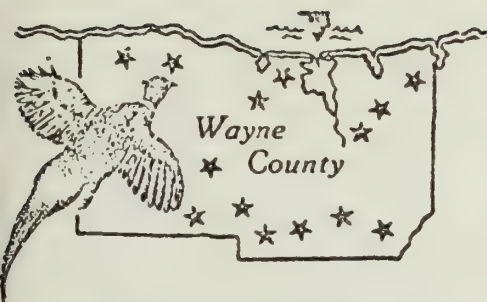
I feel that the proposal was well written, and does much to improve the poorly planned original boundaries. I feel, however, that rather than designating certain areas "areas of ecological concern" they should be included in the National Park in order to insure adequate protection. Those and other areas which should be added are the northern slopes of the outer range, lands east of Lake Muchmina, Mystic Pass, Lake Chelatna area, Collinsville and Peter's Hills-Dutch Hills area and all lands between the crest of the Talkeena Range and the proposed south addition. Inclusion of these areas, an additional 1,834, 000 acres, would further facilitate management of the park as a single ecosystem. These areas are particularly crucial because they constitute calving grounds for moose, elk, and range for wolf and grizzly bear. Further consideration should also be given for the other proposed additions.

Mt. McKinley is a magnificent area which should be expanded so that logical management can be achieved.

Sincerely,
Nancy Craft
Nancy Craft
University of Colorado
Wilderness Study Group

RESPONSE TO UNIVERSITY OF COLORADO WILDERNESS STUDY GROUP

1. This alternative is discussed as Alternative B-15 in this Final EIS.



Wayne County Federation of Sportsmen's Clubs, Inc.

Congressman Frank Horton
May 8, 1974
page 2

Third: INFRINGEMENT UPON STATES' RIGHTS IN ALASKA BY FEDERAL GOVERNMENT

Proposals in Washington mainly by uninformed do-gooders threaten to turn much of Alaska into a huge park without concern for states' rights, sensible game management or economics. Already plans are in progress to eliminate hunting by non-residents if the Federal government goes forward with its plan of making a few million acres off-limits to the sportsman.

I urge you to listen to the people of Alaska, informed people, who are in the best position to project the needs and best use of the lands in this our largest and, in some ways, our greatest state.

I am taking the liberty of attaching a copy of an aditorial which appeared in the May issue of the Alaska magazine, the official voice of the state. If you can find time to read this, it will, far better than I can, clarify the situation.

I urge you to do all in your power to see that Federal intervention into Alaska's internal affairs is held to an absolute minimum.

Thanks for your time and careful consideration to these important requests.

Yours very truly,

Donald B. Van Liere
Councilman
Wayne County Federation of
Sportsmen's Clubs, Inc.

DBV:ac
Attach (3)

Outdoors Editor Jim Rearden, in the following editorial comment that would otherwise have appeared in the "Alaska Sportsman®" section of ALASKA® magazine, points up the growing problems of overlapping bureau controls of Alaska's fish and game. The new Native claims allotments and the new takings of Alaskan land by the Interior Department (and Agriculture) frighten us. Should the bureaucrats from distant Washington, D.C., elect to assume management and control of fish and game from the established State of Alaska Department of Fish and Game, only chaos can be the result.

New bureaucrats and politicians (and there's a fresh batch periodically to remind us how remarkable it is that our democratic system survives at all) can't make intelligent biological management decisions. Or can sociologists bleeding for this or that cause be expected to make practical decisions for birds and four-footed animals and fishes that operate under entirely different rules than two-footed men animals.

Pending is the biggest power and land grab by the Federal Bureaucracy in America's history and if Congressmen aren't made aware of the dangers in this move, every voter in every State is going to see the erosion of liberty itself, in his state, his town, and in his own measure of personal freedom.

Tell your Congressman to leave the states' rights sovereign as they were intended to be and start giving us less government instead of more. Tell him to start saving us all real money by cutting back on heavily expanding bureau expenditures. Tell him that we, the voters and the taxpayers, can consent to no more assumptions of our rights to govern and not be governed by autocracy.

Robert A. Kennedy

By JIM REARDEN

Some Alaskans are already worrying about management of resources in Alaska after terms of the Alaska Native Claims Settlement Act are fulfilled. At that time, if present recommendations of Secretary of the Interior Rogers C. B. Morton are accepted by Congress, about 83 million acres of Alaska will be added to the national

systems of parks, wildlife refuges, forests and wild and scenic rivers.

The state of Alaska will have selected and have title to about 103 million acres.

Alaska's Natives will own about 40 million acres.

Most of the rest of Alaska will remain under federal control in various land classifications.

Last February 18-20, the American Society for Public Administration, in cooperation with the Alaska Humanities Forum and the University of Alaska, Anchorage, held in Anchorage a symposium titled, "After the Land-Use Commission, What?" The Federal-State Land Use Planning Commission for Alaska is the agency created by the Native Claims Settlement Act to study and make recommendations to Congress on land use in Alaska.

Included on the symposium program were panels treating watershed management, fish and game management, recreation management, natural resource management, relating use philosophies to management, and legal barriers to cooperative management.

We had this to say at that meeting:

Within a few years Alaska will have changed from a vast relatively undivided region into a complex jigsaw puzzle of private land, federal parks, quasi-parks, wildlife refuges, ecological ranges and perhaps formal wilderness areas, as well as state lands with its various classifications.

At the same time the human population will leap from about 300,000 to 500,000 or more; the increase largely from those attracted by construction of the trans-Alaska oil pipeline. Another important human population growth is occurring in outlying Native villages.

Alaska's big game animals, generally riding a high during the 1960's, appear now to be at more moderate levels in many parts of the state. Moose populations that were almost exploding 10 years or more ago on the Alaska Peninsula, on parts of the Kenai Peninsula, in the Nelchina Basin, in the Yakutat area, in the Interior—have suffered setbacks during the past few years. Severe winters, range deterioration due to heavy use, and natural population crashes that seem inevitably to follow peaks, all seem to be involved. It is unlikely that moose

populations will return to the levels we knew in the 1960's—at least soon.

Caribou abundance appears to be leveling, or, as with the Nelchina herd and others, they are at a much lower level than during the 1960's.

The probable barrier to free movement of caribou from the trans-Alaska oil pipeline, with its accompanying road, as well as likely barriers of other pipelines and roads, including a gas pipeline into Canada from Prudhoe Bay, the unpopular (with many Alaskans) Prospect Creek to Nome road, a pipeline likely from the Naval Petroleum 4 reserve, roads and pipelines on the Alaska Peninsula if oil is found there, and roads and pipelines in northwestern Alaska where continual and long-term seismic exploration work give a strong clue to the ultimate existence of unnatural barriers there—all pose a gradual, and perhaps not-so-gradual reduction to the free movement of caribou.

Geoff Ne
reprinted from ALASKA® mag
"Caribou abundance appears to
be leveling..."

These artificial barriers to nomadic caribou will probably result in smaller caribou herds—the day of caribou herds in Alaska such as the Porcupine herd which we share

abundant ungulates (leaving out Sitka deer), while still plentiful, are not as numerous as they have recently been. Moose and caribou are the key animals to meat or subsistence hunters for most of Alaska.

When one views the future of land-use in Alaska, and the likely future of these animals against the probable demands that will be made on them, as well as on all of the other fish and game resources, by more and more Alaskans—remembering that vast areas could have no trespassing signs on their boundaries, and/or no hunting signs, or where hunting will be severely limited, the crunch becomes apparent: more hunters will be hunting fewer animals, in less area.

The peak of trophy hunting for moose and perhaps for caribou has been reached in Alaska. Demands for these animals as subsistence foods is even now overshadowing economic and moral justification for taking them as trophies in some parts of the state.

The outlook for sport fishing is far brighter, for this utilization is generally compatible with virtually any land use.

Subsistence has suddenly become a subject of major concern in Alaska, and the word is being bandied about as the word "ecology" has been bandied about by the American public, for the past few years.

Subsistence, like ecology, means different things to different people. Some federal people who are involved in dividing up the state apparently think subsistence applies only to Natives who live in the bush. To me, subsistence means utilization of fish and game as food—and I think residents of Alaska should have priority in this use. Going a step further, I believe that the bush resident—be he white or Native—who often has few or no alternatives for food, must be given first priority for subsistence use of fish and game in Alaska.

The policies and management direction of the Alaska Board of Fish and Game has clearly given subsistence use of fish and game highest priority. This shows in the establishment of seasons, utilization of both sexes of ungulates, and the management of both big and small game on the basis of total production of pounds of meat, rather than production of trophies, or sport.

Examples of this include the moose hunting regulations of recent years for the Matanuska Valley, the Kenai Peninsula, the Nelchina Basin, the lower Yukon and Kuskokwim, and

further, the commercial fishing regulations for Alaska, developed by the Board since 1960, give high priority to subsistence fishing throughout the state—and complex social, economic, and biological factors were considered by the Board for virtually every subsistence regulation in the book.

Suddenly federal officials who expect to be responsible for management of vast tracts of land newly under their control are talking about "subsistence hunting."

So far, at least, there is no such thing in a formal or legal sense under

development of all resources, to subsistence utilization in whatever form it might take—obviously some form of cooperation in managing fish and game is going to be absolutely essential.

So far, at least, the various states have managed to retain authority over the fish and wildlife within their boundaries—except for migratory birds, sea mammals and endangered species. I hope that no further erosion of states' rights occurs, and that Alaska, through its Board of Fish and



Schrader Lake and Mount Chamberlin, elevation 9,020 feet and the highest peak in the Arctic Wildlife Range.

Gil Mull

Alaska's hunting regulations. I get the impression that the intent is to allow Natives to hunt for food on lands that are being proposed as parks, while white bush residents, whose numbers rival those of Natives in these regions, may not be receiving the same consideration. Urban citizens whose life style depends upon hunting or fishing for food, and who often live in Alaska for this very reason, also seemingly are not being considered.

Hunting and fishing for food is more than putting meat or fish on the table. It has values that are difficult to define; values that somehow relate to the nature of people. Some of us simply like to earn our food through hunting and fishing. This feeling has deep roots in Alaskans.

A meeting was recently held in Juneau to discuss subsistence problems in Alaska. Only one member of the 12-member Board of Fish and Game, the body responsible for all hunting and fishing regulations in Alaska, was present—and he was not invited as a Board member.

What about fish and game management after Alaska has been carved up?

Game, will continue to have jurisdiction over its wildlife.

Good biological data are essential for development of sound fish and game regulations. Since statehood, despite the fact that most of Alaska has been under one agency or another of the federal government, federal agencies have contributed little to the development of fish and game management through state regulations.

The future Alaska, with huge tracts under specific federal use programs, presents real problems to the state: should the state be required to produce all the biological data necessary for sound wildlife management on these lands? I hope that federal agencies will provide their own scientific staffs, and provide the Board of Fish and Game with data, along with recommendations on state regulations that should be applied to these lands.

Plans by federal agencies which expect to take over administration of specific areas include issuance of hunting and/or subsistence permits, for the taking of game on these lands.

d wildlife management, and government, dictate that permits are required only when they are not. It has been only in recent years, for example, that permits have been required to hunt brown bears on Kodiak National Wildlife Refuge, when it became necessary for an orderly harvest. The Department of Fish and Game established a permit system for hunting polar bears. With knowledge, no permits are needed to hunt specific areas of the state today, except for the Kodiak bear, and that has developed into a permit system, but it came only when there was a clear need for it.

Several plans for massive permit systems, for specific land management purposes, appear to be unnecessarily expensive, especially for remote areas of Alaska, and it appears to me that plans for such a system are an implicit admission that the agencies involved know little or nothing about fish and game management in Alaska. To my knowledge the Board of Fish and Game has not been consulted by any of the federal agencies involved on plans for game management, or on contemplated hunting or license permit systems.

Cooperation will be absolutely vital if proper management of fish and game is to be achieved. The future of Alaska's wildlife management implies two-way action. Often, in Alaska, cooperation has been one-sided. The recent subsistence conference, without Board of Fish and Game participation, is a good example. The jeopardy of the muskox on Nunivak Island is another; if scientific management dictates that some ancient bulls be removed from the herd. Since these are not domestic animals, and no purpose can be served by transplanting them, practicality indicates they should be removed by hunting. But the Department of the Interior has refused to do this, despite regulations enacted by the Board of Fish and Game, and is continually urging and strong recommendations to that effect by its staff of experts.

The Marine Mammal Act of 1972, which removed a good management

system, and replaced it with nothing, is another example of this type of cooperation.

With vast regions of Alaska either uninhabited because of land use policies, or where hunting may be allowed only under wilderness area rules without mechanical aid, it appears possible that some game populations will have the opportunity to cycle. We may see a repetition of the unhappy Yellowstone Park elk situation, with its attendant range damage, massive die-off, and extraordinary changes in the so-called "natural environment."

The changes occurring in Alaska today too often appear to be out of control. Too many agencies are making plans in too many directions, with not adequate knowledge of what they are doing—and with inadequate, or biased knowledge, of the eventual impact on the people and the wildlife of Alaska.

The Alaska Board of Fish and Game, despite all its inherent weaknesses, that of being politically appointed and subject to change with every change in governor, and despite insular views of occasional members, has generally produced good results. When I compare the regulations of today with the hunting and fishing regulations of Alaska as a territory, I cannot help but think we have made good progress. Current regulations are more responsive to the needs of users, and are more soundly based on biological data than were the Territorial regulations I knew.

Many problems faced the Board at its founding in 1960, and these problems have not diminished. They grow with the increase of people in Alaska. The budget of the Department of Fish and Game—about two percent of the total state budget—has been ridiculously low. Law enforcement agents, both under the Departments of Fish and Game and Public Safety, have not increased and are being taken farther and farther beyond their ability to control, particularly in the commercial fisheries, and in the guiding profession.

Alaska's court system's refusal to recognize the value of Alaska's fish and game resources has been a continual irritant to all thoughtful Alaskans. Good wildlife regulations, the basis for most of Alaska's management programs, are worthless without adequate enforcement, and without cooperation of the courts when there is enforcement.

These problems can be expected to intensify with the implementation of the Alaska Native Claims Settlement Act, after the work of the Federal-

State Land Use Planning Commission is done. In addition, there will be many new problems, for the way of life in Alaska is drastically changing with the sweeping Congressional Act.

Recognition by all agencies that the state of Alaska has primary regulatory authority for fish and game is the first step that will be needed if our present coherent management program is to continue.

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FRANK HORTON
U.S. REPRESENTATIVE
34TH DISTRICT OF NEW YORK

COMMITTEE:
GOVERNMENT OPERATIONS
RANKING MINORITY MEMBER

DAVID A. LOVENHEIM
ADMINISTRATIVE ASSISTANT

Congress of the United States
House of Representatives

Washington, D.C. 20515

June 10

1 9 7 4

WASHINGTON OFFICE:
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WASHINGTON, D.C. 20515
(202) 225-4916

DISTRICT OFFICES:
314 FEDERAL BUILDING
ROCHESTER, NEW YORK 14614
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WAYNE COUNTY OFFICE BUILDING
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Honorable Rogers C. B. Morton
Secretary of the Interior
Department of the Interior
Washington, D.C.

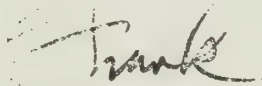
Dear Rog:

In behalf of my constituent, who is
identified in the attached letter copy,
I should like to request your consider-
ation of this matter.

Thank you for whatever information and
assistance you can provide. I look
forward to your reply.

With kindest personal regards, I am

Sincerely,


Frank Horton

FH: dh
Attachment

Please reply attn: Darrell Hotchkiss

3515 LaMay Lane
Reno, Nevada 89502
April 20, 1974

Mr. Theodor R. Swen
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swen:

The Western Wilderness Association in its general comments on the National Environmental Impact Statements believes: (One) all areas in the 83 million acre withdrawal should be studied for wilderness. (Two) national wildlife refuges and ranges should not be open to oil development, pipeline construction, prospecting, or mining. Now, an area by area analysis follows. These comments are on the Alaska land withdrawals.

We support the addition of 3,180,000 acres to Mount McKinley National Park. This addition would protect important wildlife habitat for wolf, caribou, moose, and Dalls Sheep. This added area would also protect the mountain massif, glacial systems, and the Cathedral Spits.

The Association urges the addition of at least 1,870,000 acres to Katmai National Monument in Alaska. This would preserve habitat for the Alaska Brown Bear. It is our recommendation the 7,300,000 acre Yukon-Kuskokwim National Forest not be established. Additional lands could then be selected. We recommend that the Battle Lake area and the Alagnak River area be added to the monument. The national monument should be changed into a national park with no mining allowed.

We support the proposal to establish a 440,000 acre Aniakchak Caldera National Monument. This would protect the world's largest dry volcanic caldera plus lava flow, cinder cones, a lava plug, warm springs, explosions pits, and a rift. The Association proposes that the unit be closed to hunting to protect the Alaska Brown Bear population.

The Association supports the establishment of a Harding Ice Field- Kenai Fjords National Monument totaling 300,000 acres. This protect a 700 square mile icecap.

The Association supports establishment of a 350,000 acre Cape Krusenstern National Monument to protect internationally significant archeological sites.

We support establishment of a Kobuk Valley National Monument totaling 1,850,000 acres. This would preserve habitat for caribou, moose, wolver, and black and grizzly bears. The Monument would include oxbow lakes, sand dunes, and the Salmon River.

The Association proposes establishment of ~~2x~~ 2,610,000 acre Lake Clark National Park. This would preserve lakes, glaciers, valleys, mountains, volcanoes, and springs. The Association opposes hunting in this unit of the National Park System. No national park allows hunting.

The Western Wilderness Association urges establishment of a Wrangell-St. Elias National Park totaling at least 14,140,000 acres. This would include the proposed Wrangell National Forest which we recommend be included in the national park. This area would preserve Mount St. Elias (18,000 feet), Mount Blackburn, the largest glacial system in the United States, rolling foothills, and coastal plain. Wildlife habitat for moose, wolf, wolverine, black, brown, glacial and grizzly bears, caribou, Dall's sheep, sea lions, sea otters, seals, killer whales, and salmon would be preserved. No hunting should be allowed in the national park.

We support establishment of a Gates of the Arctic National Park totaling at least 12,360,000 acres. Instead of establishing the Yukon-Kuskokwim National Forest, 4,000,000 acres of Naval Petroleum Reserve NO. 4 should be added to the Gates of the Arctic National Park proposal. No hunting should be allowed in the national park.

We support establishment of 1,970,000 acre Yukon-Charley National River. The Association recommends no mining or hunting be allowed in this unit of National Park System.

Chukchi-Maruk National Reserve should be a 2,690,000 acre National Monument. This would preserve wildlife, lava flows, and deep crater lakes. No hunting should be allowed.

The Association recommends establishment of a 120,000 acre Alaska Coastal National Wildlife Refuge. This would include addition of 56,000 to the Department of the Interior proposal. No mineral leasing should be allowed in this unit. This proposal would protect five million seabirds, 100,000 sea lions, harbor seals, walruses, polar bears, sea otters, and ringed seals.

We recommend addition of 3,760,000 acres to the Arctic National Wildlife Range. We oppose construction of a natural gas pipeline across this unit. The Association opposes hunting in the wildlife range.

Instead of establishing an Iliamna Natural Resource Range, a 2,850,000 acre national wildlife range should be established under sole management of the Bureau of Sport Fisheries and Wildlife.

The Association recommends establishment of a 4,400,000 acre Koyukuk National Wildlife Refuge under the sole management of the Bureau of Sport Fisheries and Wildlife with no hunting allowed.

The Association supports establishment of Noatak National Wildlife Range totaling 7,590,000 acres under the sole management of the Bureau of Sport Fisheries and Wildlife. No hunting, oil development, or mineral leasing should be allowed.

We urge the establishment of a 1,400,000 acre Selawik National Wildlife Range.

The Association supports establishment of a 2,740,000 acre Togiak National Wildlife Refuge with the addition of an additional 500,000 acres to the north and east for a grand total of 3,240,000 acres. No mineral leasing, oil development, or hunting should be allowed.

The Association supports establishment of a 9,090,000 acre Yukon Flats National Wildlife Range. This would include 25,000 miles of streams, and 40,000 small lakes. The area has the greatest density of nesting ducks per square mile in Alaska.

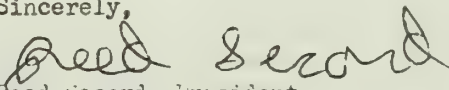
The Association supports establishment of 5,100,000 acre Yukon Delta National Wildlife Range including all of the existing Clarence Rhode National Wildlife Range. The Delta produces about 80 percent of swans on the Pacific Flyway, more than half of the continental black brant population, and 80 percent of the emperor geese.

The Yukon-Kuskokwim National Forest should not be established. 4,800,000 acres of alternate selections are mentioned earlier in this report. We recommend that 2,500,000 acres of other alternate selections be selected from lands having a high wilderness or wildlife values.

The Association recommends the following wild rivers be established: Beaver Creek (200,000 acres), Birch Creek (200,000 acres), Fortymile (320,000 acres), and Unalakleet (104,000 acres). ~~No~~ mineral leasing of oil development should be allowed in these areas. Hunting should be allowed in the wild river areas.

Finally, we recommend no native selections be allowed in 83,000,000 acres of national interest areas including national parks, National monuments, national wildlife ranges and refuges, and wild rivers. At stake in Alaska are enormous amounts of scenic, wildlife, and wilderness lands. Thank you for this opportunity to express the Association's views.

Sincerely,


Reed Secord, President
Western Wilderness Association

1901 Pennsylvania Ave., N.W., Washington, D.C. 20006

July 19, 1974

Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Sir:

The Wilderness Society appreciates the opportunity to comment on the adequacy of the Draft Environmental Impact Statement (DEIS) on the proposed Mt. McKinley National Park additions, Alaska. The Wilderness Society, a national conservation organization, with 100,000 members and cooperators in all 50 states, has a long and deep involvement in Alaska public land matters.

The following comments are directed specifically to that we consider deficiencies in the DEIS and are intended to assist you in preparing the final impact statement which would be more acceptable from a public land dedication standpoint and the national interest in this proposal.

We feel that the Mt. McKinley addition statement is one of the better proposals submitted by the Secretary of the Interior to the Congress in December, 1973. The proposed additions do much to correct boundary adequacies existing since the Park was established in 1917. However, the Environmental Impact statement is deficient in that it does not analyze:

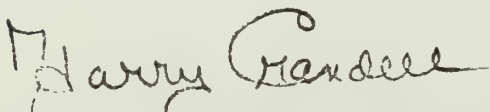
1. The significant impacts on the Park proposal that have resulted from the 1972 give-away of critical lands on the south to the State of Alaska.
2. Whether such lands proposed to be transferred to the State of Alaska should be included in the Park.
3. The problems and impacts of omitting Chelatna Lake from the Park extensions.

While we appreciate the opportunity to comment on the DEIS for the proposed additions to Mt. McKinley National Park, we feel that the review exercise could be entirely meaningless unless public input received by the Interior Department is fully considered in a final decision which must then be reflected in changes in the Secretary of the Interior's proposals to the Congress. In our opinion, the most serious deficiency of the DEIS is that it asks the public to comment on a draft statement on which a final decision has already been made by the Secretary of the Interior. In other words, the public is being asked to participate in a review exercise on a draft proposal which the Secretary of the Interior has already transmitted to Congress in accordance with the provisions of the Alaska Native Claims Settlement Act. We expect that the final impact statement will incorporate changes suggested by citizens and will be followed promptly by revisions in the legislative

proposal which the Secretary of the Interior had submitted to Congress December 18, 1973.

Thank you for the opportunity to comment on this important proposal.

Sincerely yours,

A handwritten signature in cursive script that reads "Harry Crandell". The signature is written in dark ink and is positioned above the typed name.

Harry B. Crandell
Director of Wilderness Reviews

RESPONSE TO COMMENTS BY
WILDERNESS SOCIETY

1. This EIS discusses impacts on the environment as a result of the enactment of this proposal, and cannot address impacts of any action which is not a part of this proposal.
2. The possible inclusion of these lands into the park is considered in alternative B-14, along with the impacts of this action.
3. As stated in the response to comment A, above, the impacts of omitting a certain area cannot be addressed in this statement, as it is not a part of the proposal. However, impacts associated with the inclusion of the Lake Chelatna area are discussed in alternative B-9.
4. The Department had originally intended to produce final EIS's with these legislative proposals even though the CEQ Guidelines offer the option of using drafts in cases like this. However, it soon became obvious that we could not accomplish this within the severe time frame allowed, i.e., before the December 18, 1973, date specified by the Act. Nevertheless, Final statements will be completed and sent to Congress and the Native organizations for consideration in the actions which have yet to be taken. Submission of a draft with new legislation does not shut off the opportunity for full public review and disclosure of those review results. In the ANCSA case, particularly, those results will be before the Congress in the Final Environmental Statements and it will undoubtedly be some time before Congress can act due to the time allowed for the village and regional corporation selections. Final Environmental Statements will be available considerably before that time. The opportunity for input to the decision process, as in all legislation, remains completely open to the public throughout the legislative process yet to come. Congressional hearings will most likely be held and public comment sought.

March 21, 1974

Dear Mr. Swem,

This letter concerns the Draft Environmental Impact Statement your committee has prepared for Mt. McKinley National Park. My husband & I have lived in the vicinity of the Park for almost 3 years; one winter near the Park station, one winter at Wonder Lake, and one winter in a cabin we built on the Tongona River, west of the Park. I feel, therefore, that I should comment on the proposal & some alternatives.

Proposal (Ch 1) The purpose of a National Park, as quoted in the proposal, is "to provide maximum appropriate public use consistent with preservation of values." This purpose is subject to wide interpretation.

I do not feel that there should be additional roads into the Park, either at present or with the proposed extensions. This, to me, would be the only way "consistent with the preservation of values" of the McKinley wilderness.

I favor the extensions as proposed, with perhaps a few of the alternatives. I am interested in your inclusion of Areas of Ecologic Concern, i.e. Mystic Pass, and the moose calving areas near Murchisonia. I hope that these will remain in the proposal, as these two areas should be kept under special consideration and study to preserve the wild life there. The sheep hills near us seem to be fairly heavily hunted and we hope that the future will continue to find a large natural population of sheep there.

I also favor the Plan of ~~the~~ keeping the northern part of the park essentially as is.

Of course, as the proposal states, it will create pressure on the southern part of the Park, where development will likely be going heavily. This could be especially true in view of the proposed development of hydroelectric power on the Susitna River. Still I favor no penetration of roads into the southern area of the Park. There are so few large wilderness areas left. Development inside the Park should not take place.

For this reason, I am in agreement that a cooperative planning and management area is essential. It actually should border the hole Park, even the west and north. Citizens in the areas should definitely have a role to play as well as people definitely experienced in Land Use Planning, not merely political appointees.

Such a group can prevent
upland development adjacent
the Park. It should be
remembered that development,
recreational, industrial, commercial,
(whatever) ~~will~~ not have to take
place. It has been assumed as
an ~~more~~ inevitable process in this
country, but it does not have to
be true in Alaska.

Ch. 3 Impact

The impact of extending the
road would grossly perpetuate
the status quo. I favor this and
do not give any concessions to
a road building or hotel
construction within the Park. The
present road has impact on
the "visual integrity" of many
views. In addition, having a
road requires ~~meaning~~ stream
channelization procedures on the
sandy beds of the river & creek
it crosses. This further ~~improves~~

the natural situation.

I favor keeping roads from the park not to keep people away, but to make their experience there as close to the land as possible. This will, of course, prevent some from seeing very far into the interior of the park, except through slide shows, & other interpretive programs. But this sacrifice seems necessary.

The impact on the area next to the park will be all the more important, then, for car oriented travelers who still want a quiet time. These campgrounds should be made to take this fact into consideration.

Alternatives

(#12) After the natives have selected their lands in Cantwell, I have heard that they ~~would~~ ^{would} like the park to come right ^{up to} ~~the~~ their borders. This alternative should

be investigated thoroughly

#13 Perhaps Broad Pass, with its vistas, should be in the Park, in order to prevent roads & structures from changing the sweep of the view. If not, it should be zoned for no building, no ATV's, and no roads.

another alternative - how about establishment of a "scenic corridor" of a mile or so along the highway, so that drivers do not have to look at gas stations, billboards, etc. This may not be a federal matter, but can be encouraged if mentioned in the proposal.

I appreciate your time in reading this letter. I hope the Park extensions will go through as suggested with due consideration

alternatives.

Sincerely

Mrs. Charles (Nevrey) Bate

Box 61

McKinley Park, Alaska

99755

DATE: May 28, 1974

SUBJECT: Review of Draft Environmental Impact Statement for Mount McKinley
National Park

SUBMITTED BY: Connie Barlow

PERSONAL BACKGROUND:

Educational and Vocational Background: I have been a student at Michigan State University from 1970-1974, majoring in the fields of Natural Sciences and Natural Resources. Since 1972, I have been employed during the summer by the concessionaire at Mt. McKinley National Park. I was a guide for the park wild-life tours last summer, and will be employed as such again this summer.

Bias: I am decidedly in favor of the legislative and administrative proposals outlined in the DEIS.

Assumptions: I view environmental impact statements not only as an administrative force which necessitates equal consideration of the environment along with economic concerns, but as an all-inclusive tool for the process of decision-making. Since Environmental Impact Statements are the single readily-available, public insight into the decision-making process, they ought to include all of the inputs used in decision-making. An EIS which demonstrates the environmental implications of an action would, therefore, be incomplete as a decision-making tool unless economic cost-benefit analyses and legal feasibility considerations were included. (CEQ 1973 EIS guidelines state that cost-benefit analyses are to be included in the EIS if such analyses have been done. Sec. 1500.8 (a) (8))

GENERAL COMMENTS

1. The CEQ guidelines state that EIS should be "succinctly in a form easily understood, both by members of the public and by public decision makers". As it stands, I view the content and form of the DEIS for McKinley to be significantly deficient in this regard:

Deficiency of content:

(a) Geographic locations mentioned in the text should be shown on a map as well. Presently, such locations as Slippery Creek (p. 93), Sunflower Basin (p. 94), and Peter's Hills- Dutch Hills (p. 137) are not shown on any of the maps. This greatly impairs comprehension of the proposal and alternatives.

(b) The legal aspects of the proposed boundary extension and alternatives are not addressed. I was not able to personally assess the boundary alternatives because I questioned the legal practicalities of including State TA lands and particularly Native Village selection lands in the park boundary alternatives. The present analysis under the heading, "Background", is inadequate to accomplish this task. The date that Native Village and Regional selections will be finalized should be included. It would be extremely useful to be supplied with a legal priority listing of various categories of land such as:

1. State patented
2. Native Village selections
3. Federal d(2) lands
4. Native Regional selections
5. State Tentatively Approved (TA) lands
6. State selections pending lands
7. Federal d(1) lands

Furthermore, it is essential that a map be provided that shows exactly what lands in the McKinley region were withdrawn by Morton as d(2) lands. Does it coincide exactly with the proposed boundaries of the DEIS?

Deficiency of form: In general, the information is adequately stated by which a decision can be made; however the form of the presentation greatly hinders the objective and complete analysis of the information. Following each descriptive section, I suggest that the information should be summarized in Table format:

(a) A table of environmental impacts of the proposal and alternatives should be included. These impacts could be judgmentally categorized into beneficial vs. adverse effects, shortterm vs. longterm effects, retrievable vs. irretrievable effects, and localized vs. widespread effects.

(b) Alternative boundaries should also be tabulated in regards to the legal and administrative effects. For example: Are the Natives and the State in favor of, opposed to, or neutral to each boundary alternative? What are the legal implications of each?

(c) Alternative Management Concepts (Administrative proposal) would also be easily compared if put into table form.

2. Factual data and subjective judgments are not clearly separated. This creates a tremendously detrimental effect to the credibility of the DEIS. I believe that presentation of the data in tabulated form (as suggested above) would lessen this problem.

3. References should be cited more often. As it stands, it appears that many impact judgments have no lucid factual base,

4. Adverse effects of the proposal both economically and culturally are not directly presented. Instead, such effects are often modified by impact-reducing adjectives when cited. Impact statements must strive to objectively present the information to be used in decision-making. Furthermore, I view the beneficial effects of the proposal to be sufficiently strong so as to outweigh the negative effects, no matter how strongly stated the latter may be. I therefore suggest that adverse effects be given more credence. For example:

(a) Page 133. The adverse effects of acculturation are not addressed. The proposal will accelerate local Native acculturation from a subsistence to cash-based economy. This should be plainly stated as an adverse effect.

(b) Page 136. No mention is made in the section, "Impact on the Local Economy" as to the flying service for McKinley climbers using routes presently beginning outside of park boundaries, such as the popular West Buttress route. Will this activity be curtailed if the proposal is implemented? If so, what is the international impact on future climbers of McKinley?

(c) Page 145. The statement portrays a minimal statewide potential (.1%) for coal in the northern area of ecological concern. However, no percentage as to the local potential and impact is quantified. (As an aside, if Congress passes, the legislative proposal, does this automatically entail federal authority to implement the administrative proposal in regards to federal supervision of land uses in the areas of ecological concern?)

(d) Page 137. This does not specifically list the adverse economic impact of including Cholatna Lake in the proposal. This area consists of several private holdings, and therefore a cost estimate should be supplied which the federal government may be required to pay in order to avoid a "taking" problem.

DETAILED COMMENTS

Description of the Proposal

Page 1: What is the source of the listed "purposes of Mount McKinley Park"? Are there any legal problems which evolve out of the differences between these listed purposes and the 1917 Congressionally stated purposes?

Page 2: Table 1 should be "in millions of acres" rather than "in acres".

Page 11,12: "Visitor staging area" should be defined.

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Description of the Environment

The following four technical comments are included because the EIS may prove to be useful in years to come as an excellent summary of the McKinley Environment. It should therefore be as accurate as possible.

Page 91: The Caribou map may be deceiving. Because the Savage drainage is the only known area for caribou calving west of the Nenana, it looks as though all the caribou west of the Nenana must migrate to Savage River to calve. In order to alleviate misconceptions, lack of data should be clearly identified here.

Page 99: Murie (1944) is referenced in regards to a listing of wolf food habits. I question the inclusion of red fox as a food for wolves, based also on Murie (1944), page 59 of the 1971 reprint

Page 106: The wood frog is designated here as the only species of amphibian in Alaska. This should be changed to refer only to McKinley Park, for it is my understanding that Alaska contains also these amphibians: Rana pretiosa, Batrachoseps attenuatus, Triturus granulosus, Ambystoma gracile.

Page 108: The statement that unusual environmental events may in part cause recurring fluctuations in northern mammal populations is misleading. If this must be stated, then reference should also be made to more significant causes such as lack of sufficient year-round predation. (Craighead and Craighead, Hawks, Owls, and Wildlife, 1969.)

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Environmental Impacts of the Proposed Action

Page 133,134: No known subsistence use is listed as occurring in the proposals except for the Telida and Nikolai Indians. It would be reassuring to be informed as to how closely the entire area was checked for subsistence use. What was the source of the information? Were the Joint Federal-State Land Use Planning Commission's subsistence studies used? Please cite the references.

17

Irreversible and Irrecoverable Commitments

Page 155,156: The terms "long-term" and "irrecoverable" are ambiguous. NEPA and CMA guidelines do require these issues to be addressed, yet I believe that specific use of the terms should be quantified. For example, controlled burning of vegetation should be stated as an irretrievable impact for X number of years. (It should be fairly easy to quantify the time factor by referring to vegetation successional studies in the Alaskan interior, such as that published by Vierick in 1966, as listed in the DEIS references.)

Furthermore, I would hesitate to label controlled burning as irretrievable, when the loss of mineral potential is not also labelled as such. The latter is explained as retrievable in the DEIS because Congress has the power to alter management of the area at any time in the future. This may be legally possible, yet is such a future alteration realistically feasible?

18

Alternatives to the Proposed Action

1. Alternative Boundary Locations

Alternative boundary proposals essentially constitute a shuffling of management authority between the State and Federal governments and in some cases, Native control. Complete considerations for alternative boundaries cannot be made until:

(a) The legal feasibility of such changes are known (particularly for the B-13 and B-14 alternatives.

(b) The State and Native reaction to such alternatives are considered. For example, boundary alternative B-12 mentions that the Natives are in favor of such an alternative. This aspect should be considered along with State desires for each alternative.

Page 182: B-9. I suspect that recent judicial decisions may make the Chelatina Lake alternative legally impossible. If such is the case, this should be noted in the final EIS.

Page 202: B-14. A beneficial effect of this alternative was overlooked; Adding the crest of the Talkeetna range may increase the diversity of wildlife in the park by adding Mountain Goat habitat.

2. Alternative Management Concepts

The proposed management concept should be restated in this section, before the alternatives are presented. This is especially important because the initial presentation of the management proposal occurs on page 8, and it is not specifically cited in the table of contents.

3. Alternatives to the Proposed Master Plan

Page 211: In regards to "Development for Public Use", it would be beneficial to include data on present visitor use and development to accommodate use and the adequacy of such development, along with future estimates. This will aid in the decision-making as to the practicalities of the proposed developmental extent versus the "more" or "less" intensive developmental alternatives.

In regards to the alternative of "No Interpretive Program", lack of interpretation is presented as having a less adverse effect on the environment than the presence of interpretation. I view this to be a serious error in judgment. Interpretation can adversely affect the environment if it is of the sort which necessitates development. However, I believe that present interpretation and possible future interpretation in McKinley would have a net beneficial effect on the environment. This is because interpretation can substantially lessen adverse visitor impacts on the environment such as littering, feeding and abuse of wildlife, high-impact camping, etc, by its educational implications. As Freeman Tilden remarks, "Through interpretation, understanding; through understanding, appreciation; through appreciation, protection." (Interpreting Our Heritage, 1957)

SUMMARY

The preceding comments and suggestions were directed at improving the DEIS of the McKinley Park proposals, so as to make the final EIS a truly comprehensive, objective, and useful decision-making tool, both for Congressional and future administrative uses.

Respectfully submitted,



Connie Earlow
c/o McKinley Park Co.
McKinley Park Co.

PLEASE SEND ME A COPY OF THE
FINAL EIS WHEN COMPLETED.

RESPONSE TO COMMENTS BY
CONNIE BARLOW

1. These locations have been added to the map for better understanding of the proposal.
2. Any lands may be included in alternative boundary consideration. Congress has the authority to consider any lands, public or private, for inclusion in the National Park System. Village and regional selections must be finalized by December 18, 1974. Legal definitions of land categories as they pertain to this statement are included in ANCSA. The Land Status map shows the d(2) lands. It also shows these lands in relationship to the proposed boundaries, which include both d(2) and d(1) lands.
3. The format of the DEIS and this FEIS correspond to Department of the Interior format requirements.
4. References have been added to many parts of the discussion in response to comments.
5. Revised and expanded discussions of both the social and economic impacts of the proposal have been included in this final EIS.
6. The National Park Service has carefully considered the impact you have mentioned and has attempted to fully address it in this statement. To characterize the accelerated acculturation of the Native peoples of Alaska as adverse, however, is a subjective judgment that cannot fairly be made by this agency. Native response to this proposal has been solicited and will certainly be made more fully known during Congressional hearings.
7. No valid existing land holdings, including airstrips, will be precluded from use. In addition, air access to specific locations within the proposal for the purpose of mountain climbing will be permitted.
8. Mining operations in the areas of ecological concern will be allowed to continue; the NPS has and seeks no authority to preclude mining in these areas as a result of this proposal.
9. Should Chelatna Lake be included within an expanded park, there would be increased monetary costs involved. The Department of the Interior, however, does not base the desirability of its National Park proposals on dollar cost. Rather, such proposals are based on criteria for parklands and beneficial and adverse effects upon the environment.

10. The "purposes of Mount McKinley Park" were developed by this agency as a means of expanding upon and interpreting the 1917 Act of clarity, specificity and relevance to the present situation and proposal. See response to USFS, comment 3, this chapter.
11. Table 1 has been corrected.
12. "Visitor staging area" may be defined as a point of visitor entry where information, orientation and one or more kinds of transportation service into the park are provided.
13. Change has been made in the map legend to "Known Caribou Calving Area."
14. This statement has been modified to more accurately reflect Murie's findings.
15. This statement has been corrected.
16. Amendment has been made. It is recognized that other environmental factors influence wildlife population levels.
17. Revision has been made throughout the text in regard to the levels of present subsistence use. Appendix G now contains Ahtna, Inc., data as to subsistence take in the villages of McGrath, Medfra, Nikolai, and Telida. Information from the Doyon, Ltd. JFSLUPC survey is now included in the text. Knowledge of subsistence uses is still incomplete, however, and the NPS proposes further study to more completely document existing uses. See Chapter I, "Legislative Proposal."
18. Vegetation lost in controlled burning is replaceable - not retrievable. This is because it cannot be assured that the same vegetation in the same proportions and quality will recur, even though a similarity to original patterns can be expected. Mineral deposits that may exist will not be affected in quantity or location by establishment of the proposed additions as parkland, and precedents exist for alteration of management to allow for their extraction.
19. No judicial decisions can affect consideration of Chelatna Lake as an alternative. This and other alternatives have been considered on the basis of their environmental value alone.

20. This information has been included in the alternative.
21. The reader is now referred back to Chapter I for the management proposal.
22. Visitor use figures and projections are now included in Table 9.
23. Revision of the impact of interpretation has now been made. We agree that visitor understanding of environmental interrelationships could mitigate adverse visitor-related effects.

Lake Minchumina
Alaska 99623
July 3, 1974

Alaska Planning Group
Department of the Interior
Washington, D. C.

Dear Sir,

My family and I have lived at Lake Minchumina, about 30 miles north of the present north boundary of Mt. McKinley National Park, for more than ~~fifteen~~ years. I have recently read the Environmental Impact Statement and the Master Plan for the D-2 extensions to the Park, and wish to comment on them, first with some general remarks and then with more specific items keyed to certain pages.

The proposed additions to the Park SHOULD be made, and made now, while this area is still uninhabited. In fact, I would be happy to see the land north of Lake Minchumina, to the south bank of the Yukon River, also included in a Park or Wildlife Refuge, or better yet, a Wilderness area. Lake Minchumina at present has about 6 people living here year-round, and 20 or so in the summer, including Bureau of Land Management people in charge of a fire-fighting base, (including helicopter crew and transient personnel). (My own family is here in summers, now, because we go to Fairbanks to get the children into high school; we will be here year-round again in a couple of years.) North of the lake, a cabin is being built on a small lake about 50 miles away; northeast of the Lake cabins are going up on Wien Lake, and there are one or two homesteaders on or near the Taziana River; otherwise, the country is uninhabited. Much of it is mountainous, and none, as far as I know, has economic minerals. Forestry and agriculture would be marginal at best, because of thin or poor soils, permafrost, and distance from markets; present vegetation includes tundra, marsh, small spruce and birch-aspen forests, mostly.

The following comments refer to the D-2 additions on the north side of the Park; I am unfamiliar with the southern additions, but from general knowledge of the area included I wish to say I believe those additions are very important. Incidentally, the present Congressmen from Alaska are NOT correct if they seem to imply, in speeches or otherwise, that Alaskans don't want any land set aside, as the D-2 proposals would do. There are MANY Alaskans, a rapidly increasing number, in fact, who want the State to remain in the relatively untouched condition it's been in in the past, and who are realizing that the only way to preserve the wilderness we now have is to set it aside deliberately, and not assume, as formerly, that it will automatically remain wild.

Comments on Draft Impact Statement ("A Proposal"):

Page 5 and 53-4--- The land around Lake Minchumina, including the area of ecological concern around the lower Kuddy River, is used for subsistence hunting, trapping, fishing and berry-picking by the people who live at the lake. Trapping extends as much as 35 miles from the lake, mostly to the east, west and south. Fishing (sport, for pike only; net, for pike, whitefish, rarely ling cod, and very rarely salmon) is limited to the lake itself, and hunting to the lake shore and creeks that run into it, the Kuddy River flats, and, rarely, nearby lakes. Practically all goose hunting is done within 1 mile of water that can be reached by river boat from the lake. (The boats are about 20 feet long, 4 to 5 feet wide, and are driven by outboard motors usually less than 50 hp.)

Page 45. Lake Minchumina's population in winter is 6 to 8, mostly white; summer population is also mostly white; transient fire crews number 200 to 300, but these men stay in a small area by the airfield.

Page 60. Lake Minchumina has a privately-owned generator capable of serving the needs of the Federal Aviation Agency when it was in full operation (houses for 8 families, navigation and communication radios, runway and a little street lighting), and of serving the accessible members of the present population. (I understand that the Bureau of Land Management has taken over 6 houses from the F.A.A., for their permanent summer staff; the F.A.A. no longer maintains the runway and has discontinued the Service Station they formerly operated here.)

Page 101. Grizzly bear range---grizzly bears have been seen occasionally around Lake Minchumina.

Page 106. Bald eagles are present in this area; so are frogs.

Page 138. There is NO need for a road to Kantishna and McGrath, as there is NO need for one from Healy to Stampede. The Alaska Department of Highways, which is proposing the former (which would go through the northern addition to the Park from one side to the other), build the latter several years ago, at great expense to the State, and it was used only once or not at all (I'm not sure which). It is still plainly visible crossing the foothills north of the eastern part of the Park, but lacking bridges and culverts which were destroyed by spring run-off, it is impassable.

Page 158. Alternate boundaries, excluding north addition: Excluding this area from the Park would relinquish the right to protect and preserve a huge area of essentially untrodden wilderness, rich in both flora and fauna of taiga, tundra, forest and lakes. It would increase the possibility of the road mentioned above transecting the whole area, opening it to human habitation and bringing water and solid waste pollution damage to vegetation and wildlife, man-caused wildfires, and other, probably irreversible, ecological damage.

Comments on the Master Plan:

Page 10. Wolves range more widely than this map shows; they are seen regularly in the vicinity of Lake Minchumina, and on April 28, 1974, a pack of 10 was seen in the Muddy River flats 15-20 miles east of the Lake.

Page 13. Most lake-dotted country is underlain by silt or sand, not glacial moraine. Moraines are mostly south of the present northern boundary of the Park.

Page 13. The caribou range shown is too large, possibly; herds used to go near Lake Minchumina and across land both west and east of the Lake but only a few scattered small groups or individuals have been seen from Minchumina to the Kantishna River in the past few years. I have heard that they are farther west, near Nicolai.

Page 30. Why is the small area of Class III land shown near the junction of the Muddy River and the McKinley River? It includes Lake Chilchukabena, which is a pretty, very shallow lake set in the south western end of the Roosevelt Hills. The lake is accessible by float plane or by hiking from the Muddy River, which in turn is accessible only by boat. Between the lake and the Muddy River, and near the river bank, is the cabin and land (homestead?) of Alfred Starr and his family; the cabin has been there for many years, and is used seasonally by various members of the Starr family, whose present home is in Nenana. The cabin was old in 1951, and was being used by Alfred Starr at that time. (Hearsay has it that Alfred married a daughter of Roosevelt John, an Indian who lived in the area in the 1920s and later; Alfred is an Indian originally, I think, from Tanana.)

Page 48. I understand the paragraph about subsistence use to mean that present use of the land outside the present park boundaries (that is, the small amount of hunting, guiding, and trapping presently done by inhabitants of Lake Minchumina, Nicolai or perhaps others who have trap lines in the area, or who hunt moose down the Muddy River) may continue, unless it can be shown to be causing "significant reduction of resources". This seems both fair and wise. The Indians have maintained themselves in the used areas over the years, allowing for natural fluctuations, and an attempt to prohibit present local inhabitants to continue their present use will certainly result in ill feeling and probably in some continuing use of the area anyhow. The boundary of the proposed addition is drawn about 200 miles of uninhabited country by means of straight lines and right angles drawn on a map, and even a person with the best of intentions could easily overstep the boundary inadvertently. Preventing moose hunting within the proposed park boundary on the lower Muddy River, for instance, would mean a park ranger stationed at the river's edge, where the river crosses the boundary---and either one where the Kantishna River crosses it, too! On the other hand, if local people were

permitted to carry on their hunting and trapping as they have in the past, they themselves would be interested in preventing any increased activity that would destroy their "own" hunting areas.

Page 54, item 2. Remarks made about the Muddy River flats, in the comments about page 48, also apply with particular force to the area of ecological concern described herein. Many of the dozen or so moose taken in the Lake Minchumina area each year are taken along the Muddy River, from its beginning at the Lake to its junction with Birch Creek. The hunting is done in the August-September hunting season, mostly, after weather is cool enough to preserve the meat but before it gets too strong because of the advent of the killing season. Few are taken in the later open season. The local population is, in general, against the taking of antlerless moose, and moose are wasteful of meat. Most of the meat is used by local hunters, for their winter food; some, taken by people who fly or come in by river boat, is sent out on the commercial airline or flown out by the individuals. Non-local hunters are few, because of the time or expense of getting to the lake; some know the area and "guide" themselves; others join forces with local people. (An increase in non-local hunters is, of course, a prospect that would need control. Limiting hunters within the park boundary to those who have habitually hunted there and who are, or possibly are accompanied by, local inhabitants.) The Muddy River flats are also trapped for beaver and muskrat by people who live at Minchumina, and, I think, by the Starr family.

General comments:

As discussed in the comments about page 138, the Alaska Dept. of Highways has a road from Rex to McGrath in its Five-Year Projection of highway construction. This road, with its accompanying disruption would negate the whole reason for the northern D-2 addition, would open hundreds of square miles of presently untouched wilderness to exploitation and development, and in general would raise havoc throughout its route. Putting this D-2 northern addition into the Park would, hopefully, make the construction of this very expensive, economically unjustifiable, and ecologically damaging road impossible.

The northern D-2 addition is at present crisscrossed with narrow dog-sled trails, and a few trails made originally for tractors. These are useable only in winter, when lakes and swamps are frozen, and most have not been used for years; nevertheless, they are visible from the air, especially when snow is preserved in them but has melted from the ground on either side. They would serve nicely for Park Rangers to traverse the area, but should NOT be developed or "restored" or used excessively, or added to. Trapping trails presently in use have some small trapping cabins located along them. These cabins and their contents are the property of the trapper, and are not abandoned, even though they are vacant most of the time. Back-country travellers, if any, should realize this, and know that a man's life might depend on finding his belongings where he left them.

are good for boating---the former is dangerous, and the latter destroyed a jet outboard engine in about 20 miles of upstream travel, by erosive action of the silt and sand in the water. Water pumps on standard motors are ruined by the same action. Theuddy River and the Kantishna River, on the other hand, are good for boats ranging from canoes to barges---the Federal viation Agency buildings and gas tanks were transported to Minchulina by barge.

The northwest corner of the Roosevelt Hills, north of Lake Chilchabena (approximately Range 20 West, Township 10 south) has a granitic granite outcrop that might be of great inclusion. A small jog in the northern boundary of the D-2 Hilltop would serve the purpose. The hills are at present inaccessible except by helicopter; no minerals have been reported in the area. Moose often retreat to the upper parts of these hills in the coldest weather, to take advantage of the temperature inversion which may range to as much as 20 to 30 degrees difference between flats and hilltop. The hills are wooded, except for the highest ridges. The granite is probably intrusive into the main mass of the hill, which is schist. Differential erosion has caused the granite to stand above the sloping hillsides like huge walls.

Sincerely,

Florence R. Collins

Florence R. Collins
(Mrs. R. H. Collins)

RESPONSE TO COMMENTS BY
MRS. FLORENCE R. COLLINS

1,2,3,4,&5. All of this information has been added to the text.

It has been very valuable in providing material for a revised discussion of subsistence, sport hunting and the analysis of impacts of the proposal on these uses.

Mr. Theodore R. Swem
Chairman, Alaska Planning Group
U.S. Department of Interior
Washington, D.C. 20240

Dear Mr. Swem,

As a former resident of Alaska, I was pleased to see the proposal for parks, refuges, monument, etc. in Alaska. Overall, I think the proposal is basically sound and if all the provisions were enacted into law or administrative order, the proposal would go a long way toward providing reasonable assurance that the unique and delicate ecosystems represented in Alaska are protected as they should be.

There are, however, some recurring deficiencies in the draft EIS that I wish to point out in hopes that your office will more fully consider these factors in your final EIS.

The refutation of mining rights and activities in national parks and wildlife habitats poses many serious environmental impacts. Specifically, I refer to your proposals for the Yukon-Charley National Rivers, the Koyukuk N.W.R., the Selawik N.W.R., the Togiak N.W.R., and the Yukon Delta N.W.R. I felt that the impacts of mining in these areas was superficially treated in your Draft EIS.

In regard to your proposals for protection of river systems under the National Wild and Scenic Rivers Act the problems associated with impacts from non-classified portions of the watersheds of protected rivers was inadequately treated. Experience in the lower 48 has shown that the river corridor protection system is a weak though often useful way of protecting rivers in a wild state.

Another point I wish to make in regards
to an omission I presume was an oversight.
It seems obvious that all non-selected
native claims lands lying within the boundaries
of parks, refuges, national forests, etc, should
automatically be included in the proposal] 1

Sincerely Yours,

Daniel W. Green
Dept. of Landscape Architecture
and Environmental Planning
Utah State University
Logan, Utah 84321

RESPONSE TO COMMENTS BY
DANIEL W. GREEN

1. This land status does not appear in the Mt. McKinley proposal area. See the EIS for a withdrawal area containing such a status for a discussion of this point.

Prepared for Jesse Grove in partial fulfillment of
the course requirements of RPA 704

April 22, 1974

Ed Haines

Proposed Mount McKinley National Park

Sections I and II are adequate.

Section III.

- A. Impact on Wildlife, Page 125, paragraph 2: ". . . but close regulation of visitor activities will minimize impacts due to visitor caused disturbances." With the proposed road (Map, page 31) through the northern addition, visitor regulation will be almost impossible. This proposed road connects the Anchorage-Fairbanks Highway (which has already increased visitation - p. 34) with Telida, Medfra and McGrath. The increase in through traffic and park access will be extremely costly to the administration and protection of the area from overuse and misuse.
- B - F are adequate.
- G. Impact on Transportation, Page 138, paragraph 3: This paragraph makes it unclear as to whether or not the proposed Anchorage- Fairbanks Highway - McGrath Road will be constructed and states that the impact is not significant in the foreseeable future. With impacts on vegetation, wildlife, park access and visitor control, the proposed road route should be identified and the consequent impacts investigated. 1
- H. Impact on Recreation and Tourism, Page 140, paragraph 3 and page 141, paragraphs 1 and 2: With the total proposed park comprising over 5 million acres and the park being established ". . . for recreation purposes by the public . . ." page 1, why should most of the intensive be excluded from the park? Over one-half of the park is proposed to be designated as 2

Primitive Area and the majority of the remainder is to be classified as Outstanding Natural Areas (Map, page 13). Potential Intensive Use areas should be studied and their impacts investigated. If visitation increases at current rates, even General Outdoor Recreation Area administration will not be able to control visitor access and subsequent impacts.

I - K are adequate.

Sections IV - VII are adequate.

Section VIII.

A is adequate

B1 - B5 are adequate

B6. National Park Including Area East of Lake Minchumina:

The impact statement (page 176, paragraph 2) does not include the impact of the exclusion of subsistence hunting in the affected area of the Lake Minchumina Native Village Withdrawal (Maps, pages 23 and 177).

B7 - B 13 are adequate.

B14. National Park Including All Lands Between the Crest of the

Talkeetan Range and the Proposed South Addition: The impact statement (page 202, paragraph 1) does not include the impact of the exclusion of subsistence hunting in the affected area of the Cantwell Native Village Withdrawal (Maps, pages 23 and 199).

C. Alternative Management Concepts: If the proposed area is not designated for National Park Service administration, then most likely, the Bureau of Land Management (multiple-use) or the United States Forest Service (primary use) will administer

3

4

the area. Section VIII-C explains the conflicts and relationships between different activities, but does not project probably uses and their impacts.

D is adequate.

Section IX is adequate.

RESPONSE TO COMMENTS BY
H. JESSE GROVE

1. Construction of this road cannot be predicted at this time. See Federal Highway Administration comment No. 5, this Chapter. The impact not considered to be significant in this paragraph is that of retaining the present transportation system if the new road is not constructed. Since the NPS does not propose this road, its impacts will have to be explored by the constructing agency.
2. Developments for visitor use in the southern extension, proposed primarily for scenic and recreational purposes, will be planned in conjunction with the CPMZ. Designation of such developments at this time would constitute a unilateral decision not consonant with the intent of the CPMZ.
3. The section of impacts on subsistence activities has been extensively revised to include a discussion of these concerns. Subsistence uses of these areas, if included in the expanded park, would not be precluded. See "Administrative Proposal" Chapter I.
4. Section VIII, E., has been revised to more accurately analyze probable uses and impacts under different management systems. In addition, the "Probable Future" and "No Action Alternative" sections provide information in this regard.

Dear Sirs

I'm writing in concern of the magnificent Denali (Mt. McKinley) I believe Brad Washburns proposal of opening the southern side of ~~Denali~~ Denali to the public - human animals in general, is absurd.

Are you familiar with a Japanese expedition of several climbers making enough trips up and back, bringing down a TON of garbage left by previous climbers. [I'm sure you're aware, under such temperatures

nothing will decompose.] Imagine the day they turn Denali into a sanitary land fill. Mt Garbage will stand to symbolize the U.S. and greater Northern America.

I might add that I've seen tourist, hand-pick bears along the newest of Alaska's highways. The reports that they've been so for years. And to mention the tender

cul, shot for the feet of
a trigger. I've seen gulls (in
McKinley Park) that may never have
tasted a fish, unless that of a
tuna sandwich.

God, I dread what the
pipeline should ~~do~~ do to the
great land, that should be
no man's own! Soon as you

~~it~~ make accessible to humans,
give way to a waste land.

For that, all that will be done
with Hart's precious oil, that
took all its life to breed, is
wasted. in how many years do
you predict?

Love Denali

shameful
to human
species, to

only animal known,
that don't flow with the
natural ecosystem.

Mr & Mrs Gordon King
Riverside Av
Merrill, Wis 54452
Dec 26, 1973

President Richard Nixon
The White House
Washington, D.C. 20000

Dear Mr. President:

We are disturbed by reports from Washington which indicate that once again private economic interests (mining, forestry, and others) are invading the public domain under the provisions of 'multiple use' in our last great wilderness, Alaska. This disgusts us, because we know that most existing wilderness areas are composed of vast areas of rock, glacier, and timberless rough country. They were saved only because they offered no easily merchantable commodity.

Alaska represents the last chance to preserve great chunks of land - 'country' of all kinds - with disregard for the economic factor, particularly as this factor applies to timber or minerals. We believe that succeeding generations have a right to some of the original America, and we think that the original Americans now living in Alaska should have a guarantee that their ancestral lands remain substantially free of the raucous intrusion of the white man's 'progress'. If the white man wishes to visit, let it be with permission, on foot, by dogsled or canoe.

We therefore strongly urge you to assure wilderness designation for at least 10.5 million acres of the Yukon Flats, and a minimum of 18 million acres in the Wrangell mountains and contiguous lands. We further request refuge classification for the Lake Iliamna area. The entire Noatak Valley, comprising the Noatak and all its tributaries, should be placed in the most restrictive wilderness classification. NO VEHICULAR TRAVEL OF ANY KIND should be allowed, except as is necessary by government agencies for the immediate saving of lives. And perhaps this last provision can be ignored. The wilderness lovers that we know would rather die there, if given a choice. Air travel should be permitted to the periphery only, with overflight of wilderness areas TOTALLY BANNED, at ANY ALTITUDE. The sight or sound of the multi-engined jet is a curse and a bane to solitude, and its track the mark of Cain on a clear blue sky.

Mr. President, we feel that it is time to make a commitment to a better tomorrow, in terms other than Gross National Product. To reserve and preserve great segments of the national treasure that is Alaska is the opportunity now before you. It will not come again. Please save all the Alaskan wilderness you can. We like to know it's there, even if we never see it.

Yours very truly

Gordon E. King
Margaret King

Gordon and Margaret King

Copies to: Senator Gaylord Nelson
Senator William Proxmire
Congressman David Obey

PURDUE UNIVERSITY

DEPARTMENT OF AGRONOMY
LIFE SCIENCE BUILDING
WEST LAFAYETTE, INDIANA 47907

February 26, 1974

Mr. Theodore R. Siven, Chairman
Alaska Planning Group
U. S. Department of Interior
Washington, D. C. 20240

Dear Mr. Siven:

I have been asked to contact you on behalf of the Institute of Agricultural Sciences, University of Alaska, Palmer, Alaska. First, I should mention that I have been a consulting scientist in climatology at the Palmer Research Center, but I do not have any other contacts or interests in Alaska.

In reading the climate and soils descriptions in the proposed D-2 withdrawals I find this information to be so general as to be in error, particularly in meso and micro scale -- a necessary scale consideration for agricultural potential. Most potential agricultural areas in Alaska require a favorable deviation in meso-micro scale in climatic matters, soils, and topographic features. The land description of the proposed areas in the D-2 withdrawals by the Department of Interior disregards the favorable areas with agricultural potentials.

Decisions made in this fashion are likely to be very shortsighted because at some point in the future agricultural development is very likely to take place without prior research and in the absence of scientifically based plans so necessary to properly guide such development in the sub-arctic.

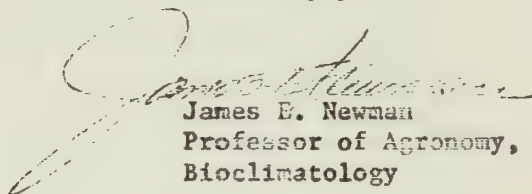
My work in Alaska has been confined to climate as related to the potential development of agriculture in this sub-arctic region. I have been concerned with delineating such areas in Alaska. I am attaching a reprint of two papers which represent a portion of my work in Alaska. I can provide three technical bulletins published by the Institute of Agricultural Sciences dealing with climatic data in potential agricultural areas. Perhaps these publications will interest you and your committee.

In my work, I have tried to address myself to basic, as well as practical considerations in developing a proper sub-arctic agriculture in a few of the most favorable areas in the state. Such development should be preceded by several years of careful survey and experimentation, in my view. Such an approach would be very different than in the past where too often agricultural development has been attempted by transferring mid-latitude agronomic practices to a sub-arctic region. And, I might add, too often the same can be said for much of the other living practices among the wite population now living there. But, these shortcomings of the past should not serve as a

model for all future attempts to develop a sustaining sub-arctic agriculture in the very restricted potential areas of the state.

I will be glad to appear before your committee for further questioning.

Sincerely yours, .



James E. Newman
Professor of Agronomy,
Bioclimatology

JEN:er

Encl.

cc: Institute of Agricultural Sciences
University of Alaska

RESPONSE TO COMMENTS BY
JAMES E. NEWMAN

1. A soils map and discussion has been added to Chapter II. A discussion of agricultural potential, revised on the basis of information from the Soil Conservation Service (see their letter, this chapter), appears in Chapter II, and an "Impact on Agriculture" section has been added to Chapter III.

Dear Mr. Swern
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington DC 20240

I approve of the legislative proposal
up to a point I approve of Assuring orderly
and responsible land and resource, Retaining
the existing character of the foreground scene
to the enlarged Park, including scenic and recreation
resources, Recognizing and protecting wildlife
habits, Encouraging and participating in the
creation of a stable multi-factored regional economic
base, and Maintain the air and water quality of the region.

But I disagree on some of the
objectives which are, Encourage responsible use
and development of valuable renewable and non
renewable resources; including mining because
it will lead to more trouble you might kill
off some of the animals or it will always lead
to pollution and we have enough pollution already
also I disagree with Maintaining the hunting
in that area I don't mind the recreational opportunities
or bit in fact I like it but I disagree of
sport hunting because as I see it it's
unfair. The transportation doesn't matter to me if
they hike up there or they continue the busing I'd rather
hike

sincerely yours
Larry Redman

Dear Mr. Swem
Chairman Alaska Planning Group
U.S. Department of the interior
Washington DC, 2024/0

I have already commented on the
legislative proposal and now I will make my
comment on the Administrative proposal right
now after I have read this proposal I can see
nothing wrong with this if you would like
to send me more information to be
better informed I'll be gratefull to
give you my opinion of the proposal along
with my suggestions on Mt. McKinley

sincerely
Larry Redman

JOHN R. SWANSON
P. O. Box 927
Berkeley, California 94701

June 26, 1977.

Chairman

Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Chairman:

Please accept my Comments, as follows, concerning the Proposed Mount McKinley National Park Additions in Alaska. I strongly favor such additions to this National Park, inasmuch as such additions would make the Park area a complete ecosystem, while in its present form the Park area only includes a smaller portion of the general Mount McKinley Region.

Such additions, as now proposed, would include most of the wilderness, wildlife and scenic resource of this Mount McKinley Region, resources of national and even international significance.

It is very important that as many complete Watersheds as possible be included in this Proposal, as well as, complete Ecosystems and Habitat areas, certainly including critical Habitat areas.

I strongly urge an expanded Mount McKinley National Park to include "Area of Ecological Concern", the "Cooperative - Planning and Management Zone", including the Lake Chukotna area, Tongass River Drainage, Lake Minchumina area and area west of southwest portion of the proposed Boundary to include Dall sheep habitat.

Such an expanded area to include nearly all of the Mount McKinley Region, an outstanding wilderness, wildlife and scenic complex.

I urge, then, a expanded Mount McKinley National Park of some 9,500,000 acres.

With nearly all of such acreage permanently managed as Wilderness.

and, with no commercial exploitation permitted in such area.

Sincerely,

John R. Swanson

Rt. 3, Box 125-A
Colville, Wa.
99114
July 18, 1974

Alaska Planning Board
Department of the Interior
Washington, D.C.

Dear Members of the Board:

This letter is to urge you to act favorably upon the proposal for the addition of the D-2 lands to Mt. McKinley National Park.

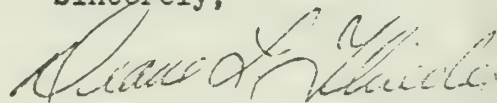
I have lived 15 years in Alaska, seven of them at Lake Minchumina and three at Summit. Of all the country I have seen in Alaska none has left so great an impression on me as Mt. McKinley National Park. It is not only just beautiful, but its pristine wilderness is almost unearthly and unreal. Perhaps here is one of the few places left on this planet to see the earth as it once must have been before Man made a problem out of his environment. The Park is an awesome, almost holy place.

Alaska now faces perhaps the greatest upheaval in all its history. Progress brings an immense oil pipeline, new roads, new people. Alaska is the last frontier... a frontier not to be conquered but to be cherished. If we don't act now to save some of it, true wilderness may become extinct. And Mankind who even now is chalking up the evils of too much "civilization", will have to face the future with despair. Someday there will no longer be any place left "to get away from it all".

Mt. McKinley National Park needs the addition of the D-2 lands. These lands will act as buffers to protect the Park and allow its rare and very valuable wilderness to expand a little. Nature will benefit and so will Man.

Thank you for giving me the opportunity to express my opinion.

Sincerely,



Diane L. Thiede

915 Will Rogers Drive
Stillwater, Oklahoma 74074
April 12, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

This letter is in response to Secretary of the Interior Morton's recommendations and proposed legislation to establish limits of the National Park, National Wildlife Refuge, Wild and Scenic Rivers and National Forest Systems on the Federally-owned lands of Alaska. The Draft Environmental Impact Statements which were submitted by the Secretary have many deficiencies which should be corrected before the final impact statements are submitted.

The impact statements seem to have the following general shortcomings which I recommend be reconsidered and corrected as appropriate.

Discussion of the alternative of a wilderness designation in most proposals is generalized. Each statement should discuss and consider a specific wilderness proposal.

The alternative of not permitting mining or oil and gas leasing in National Wildlife Refuge System areas was not discussed.

Interior proposes to name some National Park System areas national monuments. Because of their high scenic beauty and great natural values, all such areas should be named national parks.

Interior proposes to name all wildlife system areas as "National Wildlife Refuges." Since their wilderness condition is necessary to wildlife, however, they should be designated "wildlands" or "wildlife ranges." They are not merely sanctuaries, but have other values as well.

No areas proposed for "multiple use" should be permitted to stand as the Secretary has submitted them.

The following comments are submitted for each specific impact statement which has been made, and it is requested that the final statements adequately discuss the omissions as indicated:

1. Mount McKinley National Park Additions.

This is one of the better Interior Department proposals. Its additions do much to correct boundary inadequacies existing since the park was established in 1917. The environmental statement does not analyze: 1. The significant impacts on the park proposal that have resulted from the 1972 giveaway of critical lands on the south to the State of Alaska, or whether such lands should be included in the park. 2. The problems or impacts of omitting Chelatina Lake from the park.

} 1
} 2

2. Katmai National Park.

The environmental statement recognizes that the entire Katmai brown bear population is not protected as the proposal erroneously claims — because the critical Battle Lake and Magnak River watersheds are left out of the proposal. But the statement does not adequately discuss: 1. Long term impacts on the park or wildlife values which would result from this omission. 2. The impacts of expanding Brooks Camp, which already suffers from bear-human conflict.

3. Aniakchak Caldera National Monument.

The environmental statement does not discuss: 1. the impacts of an agreement with the State that leaves this park system unit open to hunting. 2. The impacts of hunting on the area's critical bear populations, now over-hunted. 3. The impacts of extensive private inholdings through native ownership within the monument. 4. The alternative of establishing an urgently needed brown bear wildlife refuge adjacent to the monument.

4. Harding Ice Field-Kenai Fjords National Monument.

This is a basically sound proposal, but the statement does not discuss: 1. Whether the inclusion of native-selected lands (with the natives' consent) within the monument boundaries should be allowed. 2. The alternative of establishing a major national park to include national forest lands to the east of Seward to Prince William Sound. 3. The alternative of eliminating the conflict with natives by identifying deficiency withdrawals outside their corporation boundaries. 4. Problems inherent in "dual (two agency) administration" of the area, a practice which has never proven satisfactory.

5. Cape Krusenstern National Monument.

This is a good proposal to protect significant archeological areas. The environmental statement, however, does not adequately discuss the alternatives of including additional lands to the north and east—if not selected by the natives—in the proposal.

6. Kobuk Valley National Monument.

The environmental statement does not discuss the alternatives of including those essential native-withdrawn lands within the monument if not selected by the natives. The Interior Department

pursued this imaginative approach for such lands within the Onion Portage Archeological District, and this concept should be expanded to protect other critical natural areas as well.

7. Lake Clark National Park.

The environmental statement does not adequately discuss: 1. The impacts on Cook Inlet natives, who have considerable interest in the area. 2. Associated impacts upon the park of "dual withdrawal" lands, should they be selected by the natives' corporation. 3. The alternative of a land swap with the State for the Wood-Tikechik area. 4. The alternative of withdrawing lands for the Cook Inlet natives outside their regional corporation. 5. The impacts of allowing hunting within the park.

8. Wrangell-St. Elias National Park and Wrangell Mountain National Forest.

This is the worst of the Interior proposals. It amounts to an outright giveaway of much of the greatest potential park lands in the nation to commodity exploitation under "multiple-use" management practices of the Forest Service. These environmental statements completely divorce treatment

of the park and forest proposals, thereby preventing any comprehensive analysis of the impacts of the overall decision. The impacts of inevitable, extensive mining on the park values in these areas are not adequately discussed. The long term impacts of extensive roads and associated developments the Forest Service encourages is not discussed. There is not even enough detailed environmental assessment to properly evaluate whether the reduced park proposal is even a viable management unit. The alternatives of adding lands to the park are not adequately discussed regarding their environmental impacts and, more important, their impacts on the long term viability of a super-national park proposal. The impacts of hunters are not discussed. The relationship between the Interior Department's forest proposals and the State of Alaska's plans for the Copper River and Chitina-McCarthy roads (opposed by conservationists) is not discussed. Nor

9. Gates of the Arctic National Park.

The environmental statement discusses an imaginative proposal which merited serious consideration, the establishment of a National Wilderness Park, and a cooperative National Wildlands with the north slope natives. However, last minute decision-making by the Office of Management and Budget threw out this good proposal, substituting a traditional approach that does not address the area's needs and problems. *This environmental impact statement is totally inadequate since it considers a different proposal than that actually submitted!* Thus there is inadequate treatment of the alternatives, which should have been considered. Such alternatives would create a truly great national park, including: 1. Adding state lands to the south. 2. Adding portions of Naval Petroleum Reserve No. 4 (PET 4) to the north. 3. Creating a great National Wilderness Park. 4. Creating a cooperative wildlands area with the north slope natives, to include some of their lands jointly.

10. Yukon-Charley National Rivers.

This is an essentially sound proposal, but the environmental statement does not analyze: 1. The impacts of the area's being *the only national park area proposed to allow mining within its boundaries*. 2. The long term impacts upon park values of visitation such mining would bring within the Yukon portion. 3. The impacts of recreation and allowing mining along the Yukon on the need to protect critical wildlife populations like the peregrine falcon.

11. Chukchi-Imuruk National Reserve.

The statement mentions that an area outside the proposal would be managed for watershed protection by the BLM, but does not discuss the impacts of such a proposal on the area's watershed values critical for waterfowl. Nor is there adequate discussion of alternatives to the proposal, and there is no discussion of problems inherent in "dual administration."

12. Alaska Coastal National Wildlife Refuges.

Alternatives not discussed in this essentially good proposal are: 1. Including additional coastal and

offshore areas—many should be in the proposal. 2. Closing the wildlife refuges open to mineral leasing. 3. Including surrounding waters and submerged lands essential to protect complete island ecosystems and their unique wildlife populations.

13. Arctic National Wildlife Refuge.

The impact statement does not adequately discuss: 1. Alternatives of greatly expanding this proposal to the west and south. 2. Cooperative international wildlife refuge opportunities with Canada. 3. Impacts of leaving the area open to mineral leasing. 4. The relation of this proposal to the potential gas line corridors under consideration by the Interior Department. These corridors should be given serious consideration in this statement.

14. Iliamna National Resource Range.

The long term impacts of dedicating this area to multiple use management are not explored in the statement. Joint administration with BLM is an unacceptable management method for the critical salmon and bear resources present here. In addition, the statement does not discuss: 1. Conflicts between oil development and hard rock mining and the wildlife resources. 2. The long term impacts and relationships between the proposal and the native people who use this area heavily. 3. The alternative of adding the Wood-Tikchik area to the proposal.

15. Koyukuk National Wildlife Refuge.

The statement fails to discuss: 1. The giveaway of half of the proposal to the BLM and Forest Service. 2. The impacts of the "potential for mining" on the wildlife. 3. The alternatives of adding critical areas to the two units of the refuge and establishing additional units.

16. Noatak National Arctic Range.

This proposal is also a giveaway to the BLM and its commodity exploitation advocates. The area should be established as either a national park or national wildlife refuge, alternatives not adequately discussed in the statement. The statement does not properly explain BLM's role in the proposal and the impacts of its involvement on the resources. Long term impacts of not recommending permanent protection for the area are ignored, along with alternatives for providing permanent protection for the Arctic caribou herd's calving area.

17. Selawik National Wildlife Refuge.

The statement does not adequately discuss: 1. The severe impacts of allowing mining in the area. 2. The alternatives of automatically including additional critical habitat areas if the natives do not select them. 3. Impacts on and the relationship with the local natives.

18. Togiak National Wildlife Refuge.

The statement does not adequately discuss or analyze: 1. The additions of substantial lands to the north and the east, regarding their impacts upon the proposal and the ecosystem as a whole. 2. The impacts of leaving the area susceptible to mining. The statement lacks sufficiently detailed explanation of the ecosystem to properly evaluate either the impacts of the proposal or its potential for long term wildlife protection.

19. Yukon Delta National Wildlife Refuge.

Imaginative serious alternatives were not discussed in the statement: 1. The inclusion of all non-selected native withdrawn lands and the potential for cooperative agreement with the native corporations to protect wildlife values on lands they will actually own. 2. The critical impacts of oil or mineral development within the refuge. 3. The overall relationship between and impacts of this proposal on the natives, and vice versa. [The relationship between waterfowl and the land ownership pattern in this area is extremely critical. The statement in no way adequately depicts the present situation or the area's needs in relation to both native people and wildlife.]

20. Yukon Flats National Wildlife Refuge and Porcupine National Forest.

This Yukon Flats/Porcupine proposal is second only to the Wrangells proposal as a demonstration of poor decision-making lacking proper consideration of the ecosystem planning concept. Here again, the Interior Department has divided discussion of one magnificent ecosystem into two separate environmental statements to avoid a true analysis of the actual impact of the Administration proposals. The impacts of the mining, logging and other resource exploitation encouraged by the Forest Service in North America's most important waterfowl area are not seriously discussed. Failing to discuss the complete ecosystem—which transcends political decisions—the environmental statements are seriously inadequate analyses of both impacts and alternatives. *All of the Yukon Flats area should be a National Wildlife Refuge System unit.*

21. Chugach National Forest.

The environmental impact statement contains little demonstration of need for this addition to the Chugach National Forest. The impacts of multiple use management and of adding the area to the forest by public land order are not adequately discussed. No indication of how the lands would be used—or the impacts of such uses—is stated. An alternative of adding the lands by means of legislation, and legislatively establishing the entire Chugach, is not discussed.

22. Yukon-Kuskokwim National Forest.

The statement does not discuss or consider: 1. The impacts on wildlife, especially those populations that move between the proposed forest and Mount McKinley National Park. 2. The alternatives of proposing strong wildlife protection provisions. 3. The overall and long range impacts of the forest on McKinley Park. 4. The impacts of resource extraction within the Nowitna Scenic River watershed. Since only 14 percent of the proposed forest contains potential commercial forest lands, the Forest Service has not adequately demonstrated any real need to establish a national forest here.

23. Beaver Creek and Birch Creek.

Serious alternatives to both proposals—not considered—should be thoroughly analyzed, alternatives that would protect the rivers' entire watersheds. For example, since they flow into the Yukon Flats area, adding them to the Yukon Flats National Wildlife Refuge should be considered. The impacts of BLM multiple use management—including mining—within the watersheds of both proposals are not adequately discussed.

24. Fortymile.

This is basically a good proposal, but alternatives not analyzed include: 1. Designating more of the river system as wild and scenic. 2. Considering the river system—with its superb scenic and recreational resources—for addition to and management as part of the National Park System, rather than within the BLM. In addition, the impacts of allowing access for mining and the impacts of that mining within the river's watershed should be thoroughly discussed.

25. Unalakleet.

Alternatives should be considered that would: 1. Protect the entire river through cooperative agreement with the natives, who may gain ownership of the headwaters. 2. Automatically include the entire river in the system, if it is not selected by the natives. 3. Protect the entire Unalakleet watershed.

Sincerely yours,

B. L. A. Wallace

RESPONSE TO COMMENTS BY
BILLY C. WALLACE

- 1 & 2. See response to comments 1,2, and 3, Wilderness Society comments, this chapter.

Susan Wellings
105 Harwood Hall
U. of A.
Fairbanks, Alaska
99701

Rogers C.B. Morton
Dept. of Interior
Washington D.C. 20240

John S. Morton

Dear Mr. Morton,

Mt. McKinley is the most magnificent wonder in Alaska, towering above all the spectacular and magic elements of a last wilderness. To build a recreation facility at it's southern border, as is proposed by Brad Washburn, so that all people "could actually feel the mountain" would be a highly insensitive action.

Any person who must walk on Mt. McKinley in order to fully experience it's magnificence will never trully understand and is not the person who "deserves" to be there. This land is filled with wonders which too many people racing through this state never see.

One who really appreciates the splendors of the land gains strength from every mountain and lake and living thing in the land and mountains like Mt. McKinley fills the heart with a feeling of humbleness to greater forces in this world.

There are many other areas in this state which can and will be developed. I feel Mt. McKinley is a symbol of a great wilderness which should be protected in the wake of future developement all around it.

This letter was prompted by an editorial which I read in the Anchorage Daily Times which encouraged Alaskans to rise to the challenge and share their mountain. I maintain that we are sharing it now....it is there safe from the litter of man to see and respect.

I am not by any means a preservationist. I am in favor of the pipeline because I see it's need, and I worked one summer for the Forest Service and understand their working. But I believe some things are sacred.

I hope this letter is not too late.

Sincerely yours,

Susan Wellings

Susan Wellings

DRAFT ENVIRONMENTAL CRITIQUE OF STATEMENT
FOR MCKINLEY PARK EXTENSIONS

Submitted by

Ginny Will Wood
Backwoods Trail
Fairbanks, Alaska

OVERALL ASSESSMENT

The first draft of the environmental statement for the proposed extensions of Mt. McKinley National Park (December 1973) suffers from the inevitable result of having been put together by a "committee" under the duress of a time deadline. It needs consolidation, corrections, additions and better organization if it is to be effective and useful for those making decisions on the proposed McKinley Park boundary changes. Some statements are in error, others need clarification, and significant omissions exist. These I will attempt to point out.

The maps should include more topographic features in order to facilitate identification of specific areas discussed, especially for those reading the report who are not familiar with the region involved.

Overall, considering the scope of the material covered and the time schedule involved, the Alaska Planning Group who prepared the report are to be commended for the report that they assembled.

I wish to endorse the proposal for both the north and south additions to Mt. McKinley National Park. Emphasis on the protection of habitat and animal populations should be given the northern extension. Scenic and recreational resources should be featured for the southern

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extension, with major tourist and camping facilities developed here or in the adjacent Denali State Park. These extensions are necessary to lessen the people impact on the present Park, especially along the existing park road; and to protect the wildlife, especially wolves, grizzlies and sheep that range outside present park boundaries to the north.

However, I would like to see Alternative Proposal B5, page 175, added to the northern extension. This area (now State of Alaska lands) was until recently open to entry, and several 5 acre homesites were filed on it. As this area is part of the home range of the Savage River wolf pack, even small hunting pressure in this area on moose which are also the major prey of the wolves could have significant ecological effect on the wolf-moose-sheep ratio, which seems to have been in balance for several decades.

Although not as much a priority as Alternate Proposal B5, I would also urge that Proposals B8, page 183, and Alternate B9, page 185 be included in the expanded Park boundary. B8, the Tonzona River area, includes outstanding alpine scenery and the beautiful Amos (Tonzona) Lakes not mentioned in the report. B9 includes Chelatna Lake, adequately discussed in the report.

I applaud the concept of a Cooperative Planning and Management Zone, but I urge that the Vanert Valley east of the present Park be included in this zone because of its wildlife and recreational resources that should not be endangered by indiscriminate development such as small tract summer homes, over-hunting, or invasion with roads. I also urge that the section of the Fairbanks to Anchorage highway between the

Rex bridge over the Nenana River south to the Susitna River bridge just south of the Denali State Park be designated a Scenic Highway with restrictions placed on further developments in order to keep this gateway to McKinley Park aesthetically pleasing for motorists.

I concur that mining should be prohibited in McKinley National Park and extensions, except in the Kantishna area which would be managed by the Park Service as an historical/cultural/recreational district with mining allowed under strict regulations to protect the scenery and wildlife. (See pages 7-8; 15; 18-20; 26-27; and 28-30.)

Construction of the proposed Rex to McGrath (and eventually Bethel) road slated to begin in 1975 should be stopped until final disposition is made of the D-2 lands in the proposed northern extension. This highway would bisect part of the northern extension providing access to hunting of wildlife that range outside the present north Park boundary, and for snowmachines. This road would serve no economic purpose, and would be expensive to build and maintain.

The alternative to including the proposed northern and southern extensions in McKinley Park would be the management of these lands, for the most part, by the State of Alaska. The Alaska Department of Fish and Game, while composed of very competent biologists, has been repeatedly subject to political and special interest pressures. Their policy on wolf control changes with administrations. The State has demonstrated a predominant concern for maximum development, highway construction, and economic return at the cost of environmental and

aesthetic considerations. The Bureau of Land Management which would have jurisdiction over lands not belonging to the State has no authority to manage land for wilderness values, to prohibit access of heavy equipment on its lands, or to control development.

SPECIFIC SUGGESTIONS

Tourism vs. Outdoor Recreation: A distinction and a different evaluation should be made between tourism (page 65), which is primarily a commercial enterprise, and outdoor recreation (page 63), which is primarily a pursuit of the physical and mental well-being of the participants, even though the two are interrelated and sometimes coincide. Also, in evaluating the impact and significance of both tourism and outdoor recreation, a distinction should be made between that involving Alaskan residents and that involving those who visit Alaska from outside the State. Facilities, resources, and programs that attract and accommodate tourists may not always meet the needs of the outdoor recreationist, and vice versa. Nor is the impact always the same. The use of land for outdoor recreation by Alaskans is year round; that of those who visit from Outside is mostly seasonal.

The Economic Significance of Mining: The significance of minerals extracted in the Kantishna district of the northern extension (page 81) is presently measured by weight. If, instead, a dollar value could be placed on this mineral production, the importance of mining in this area to the overall economy of the mineral industry in Alaska and to

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the economy as a whole in comparison to other industries, such as tourism, could more readily be assessed.

Cooperative Planning and Management Zone: This area should also include the Yanert River valley east of the present Park boundary, as it has significant wildlife and recreational value and should not be open for indiscriminate development, roads, or haphazard settlement.

That portion of the Fairbanks-Anchorage highway between the Rex bridge over the Nenana to the Susitna bridge just outside Denali State Park should be managed as a Scenic Highway to prevent ugly development along this approach to McKinley National Park.

Rex to McGrath Road: The State of Alaska Highway Planning Department has slated start of construction of this proposed highway for the summer of 1975. This would bisect much of the D-2 lands now proposed for inclusion in the northern extension of McKinley Park. All efforts should be made to postpone this construction until disposition has been made of these lands. A highway through the proposed addition or near the present boundary of the Park would afford access and impact detrimental to wildlife and landscapes. The road has no present economic justification other than to use highway matching funds, and will be costly to build and maintain. It would go from nowhere to nowhere, but would increase pressure on the Park to re-open the present Park highway to all traffic in order to serve as part of a loop route.

Tourist and Recreational Development: The present and projected additions of the northern part of McKinley Park--that area north of the Alaska Range--should be managed primarily for wildlife, wildlife habitat,

and wilderness values with minimum development of overnight accommodations and campgrounds. That area proposed for the southern extension, because of less fragile cover, presence of forest to conceal developments, and lack of permafrost should contain the major tourist and recreational facilities, supplementing those in adjacent Denali State Park.

The major objection to the present hotel near the McKinley Park station is that it is 12 miles from the first view of Mt. McKinley, and 60 miles from the best view. Consequently, tourists concentrate at the hotel in order to take the tour bus ride out to Mile 65 to see the mountain. There is also pressure for more camping facilities near the Wonder Lake area in order to "see the mountain." The southern extension and Denali State Park offer many areas that have a breathtaking panorama of Mt. McKinley and adjacent granite spires. Thus, these areas could take the impact off of the northern part of the Park with its more fragile ecosystems. Minimum overnight accommodations should be kept in the northern part of the Park, with the bus tour being an "outpost" experience to view wildlife.

CONTRADICTIONS

Page 5, line 6 and page 1, line 3. "The proposal includes legislative action to eliminate mining within the existing park and within the proposed additions." This contradicts the statement page 144, line 2: "Existing operations (mining) would be allowed to continue, but with increased control." Also, in the Master Plan for McKinley Park, page 48

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(Mining)--"Although proposed legislation would close the entire enlarged park to mining, operation of existing valid claims, carefully monitored and in accordance with regulations, will be permitted until each claim has been acquired or abandoned."

Page 143, line 8: "There are five mineral patents within the proposed additions to Mount McKinley (National Park)." This does not agree with page 147, line 2: "Present ownership patterns are as follows . . . 15 mining patents totalling 738 acres. . .", or page 78 which lists 15 patented claims in the Kantishna area alone.

SPECIFIC STATEMENTS IN ERROR

Page 152, line 9: "A relatively minor amount . . . of mining activities with no known production is actually taking place within the park and the proposed extensions at the present time." Actually, in the Kantishna area with which I am familiar there are at present three different outfits actually extracting and marketing ore. These are: (1) an antimony operation on upper Slate Creek which hauled considerable ore over the Park road in 1972 and plans to extract more in 1974. (A smaller amount was taken from lower Eureka Creek, and marketed by another outfit that same year.) (2) The Lightfoot brothers have spent several summers extracting gold from a leased claim on upper Eureka Creek. (3) The Craig family have been extracting and milling silver, lead, gold and trace minerals from a patented hardrock claim above Friday Creek for the past two summers. This has been a profitable and efficient operation. Since this ore is concentrated it necessitated very little hauling over

the Park road in contrast to the antimony operations. The above are all actively producing mines but, as of 1974, are the only ones. The rest of the mining activity is concerned with prospecting, accessment work, and stock selling promotion.

Page 209, line 8: "Continued mining in Kantishna would probably have little further effect upon wildlife." Actually, because of their traditional fear of bears and the fact that almost all prospectors in the area carry firearms at all times for "protection," there have been one or more bears shot almost every summer I have been in the Kantishna area (22 summers). Bears, and animals mistaken for bears, are killed under the rationale of self defense whether real or imagined. (During a 22 year period guests and staff from Camp Denali in the Kantishna area who hike considerably in the same area have never experienced a threatening incident with a bear.)

Miners and others have virtually wiped out black bear population in the Kantishna area. A few would-be prospectors have shot moose and caribou out of season and in excess of the limit on the mistaken belief that their occupation and "remoteness" entitle them to live off the land under the survival clause in Alaska hunting laws. The Kantishna mining area has had almost no monitoring by Fish and Game personnel since statehood.

Page 137, line 24: "Major airstrips exist at Healy, Lake Minchumina, Medfra, Shuventa, Talkeetna, Summit and Cantwell." The Cantwell strip is a small hazardous bush strip that cannot be classified as a major air-strip in comparison with the others in the cited series. No mention

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was made of the strips at Kantishna, Stampede, Glen Creek, Slippery Creek (in the present Park) or the Purkynile mine strip.

Page 42, line 12: "A longer, safer, but presently unused privately owned airstrip exists a few miles to the south . . ." This airstrip is in use, although not by commercial scheduled air traffic for which it was constructed. The present owner of the airstrip, Chalon Harris of the Denali Air Service, does almost all of his winter operations from this strip and some of his summer charters.

Page 134, line 13: "Very little, if any, sport trapping occurs in the area . . .[of proposed extension]." During the winters of 1972/73 and 1973/74 there have been 1 to 5 persons trapping in the Kantishna area. One of these persons completely wiped out a beaver colony near the Kantishna airstrip. Another allegedly shot between 4 and 9 moose for food for himself and his dogs one winter.

Page 120, line 9: "At least 20 historic structures in varying states of preservation remain [in the mining area of Kantishna]." Actually, in the townsite itself, only 2 buildings of this category remain, the rest having been demolished by trappers and miners for firewood. Two cabins in Kantishna, the old Fanny Quigley frame house near the airstrip and a small log cabin on Friday Creek, qualify for preservation, and perhaps the old mill building at Red Top mine. The rest are tar paper shacks and trailers.

Page 208, line 21: "Exceptions are roads. . . and a truck trail from Healy to the Stampede area." This so called truck trail was bulldozed through as a pioneer access road from Lignite to Stampede, but was

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never (to my knowledge) used by vehicles beyond the first few miles because of permafrost that turned it to a quagmire, washouts, and hazardous river fords. It was never a usable road.

OMISSIONS IN THE DRAFT ENVIRONMENTAL STATEMENT

Alternative 2, pages 181-182: In the description of the Tonzona River drainage, a 322,000 acre parcel of D-1, regional deficiency and State selected lands, as an additional part of the proposed northern extension of the Park, no mention is made of the existence of the scenic and recreational qualities of the Amos Lakes (also called Tonzona Lakes) in that area. These lakes, two 1-1/2 miles in length, and one about 1/2 mile long, are separated by a narrow land bridge, are bordered by large spruce and other trees, indented with bays, and offer good camping sites, fishing, boating, and hiking in adjacent areas. There is a backdrop of spectacular, glacier-clad mountains rising to the west. A privately owned hunting lodge now exists on one of the lakes. The area is used in the fall for a fly-in base for sheep hunting in the mountains.

Slippery Creek Mining Operations: No mention is made in the DES of mining activities on the Slippery Creek (Dunkle) Mine located at the base of Mt. McKinley within the present boundary of Mt. McKinley National Park. Although little or no ore has been taken out, the operation in the past few years has resulted in the moving of considerable heavy equipment overland through the park, aircraft activity to the landing field there, and a "cat trail" that switchbacks up a mountain for several thousand feet and which can be seen from the top of ridges in Kantishna.

Camp Denali: Mention is made of Camp Denali, "a privately owned environmental education camp" (page 12 in the DES and page 37 in the Master Plan), but no mention is made concerning the operation of the North Face Lodge recently established for overnight accommodations in connection with tours through the park. This is located on private land near the present Park boundary in the Kantishna area.

Effect of Southern Addition on Air Support for Mountain Climbing Parties on the Ruth and Kahiltua Glacier Approaches: At present mountain climbers can be landed at approximately the 7,000 foot level on the Kahiltua Glacier for the ascent via the West Buttress of Mt. McKinley (the most common route now used), and still be outside the present Park boundary. Don Sheldon, Talkeetna based bush pilot who supplies and supports the majority of climbs in the area, has a patented site with a hut above the Ruth Glacier where he flies in guests. If all airplane landings were prohibited in the proposed southern extension (this rule is now in effect for McKinley Park except for the strip near the railroad station), what would be the impact upon mountaineering? What would be the disposition of Sheldon's mountain hut? No mention of mountaineering impact or policies on mountaineering in conjunction with aerial support was made in the DES.

Winter Use of McKinley Park: In evaluating recreational use and impact on the Park and its extensions, little mention was made of winter recreation. In the past few years cross country skiing and ski tour camping has become increasingly popular in Alaska. In the past three years several parties and individuals have made ski trips from present Park

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headquarters to the Kantishna-Wonder Lake area, and up the glacier systems in the proposed southern extensions.

There has also been a revival in the use of dog teams for sport and transportation. In March and April of 1974 at least eight dogteams (other than Park Service teams) traveled through the present Park to the Kantishna area and beyond. Some were used to support mountaineering parties on the Muldrow Glacier route to McKinley, others were just used for an outing.

At present snowmachines are prohibited within the existing Park boundaries. Illegal hunting parties using this means of access have invaded the park from the north. There was no discussion of snowmachine impact in the area of the proposed extensions, whether or not these extensions come to be within the Park boundaries.

Use of Horses in the Park and Proposed Extensions: No mention was made of the use of horses, pro or con, and their impact in connection with either tourism or outdoor recreation. At present one outfitter, the Mercer Ranch at Lignite, supports mountain climbing parties on the north side of the Alaska Range.

Kantishna Withdrawal of 1965: In 1965 the National Park Service asked the Bureau of Land Management to withdraw approximately 9,000 acres of land from public entry for study as a possible inclusion in the Park in the Kantishna area. No mention of this withdrawal or how it relates to the larger addition now contemplated was made in the DES. The 9,000 acres includes land immediately adjacent to the Kantishna boundary of the Park and covers an area approximately four by five miles.

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The purpose of this withdrawal was to use it for campgrounds and overnight accommodations. It was not concerned with habitat or aesthetic values. The withdrawal included about 6 of the patented mining claims, one T & M patented claim (Camp Denali), and two five-acre homesites. It did not prevent public access over the withdrawn lands to mining claims outside the withdrawal area.

AN ALTERNATIVE NOT PROPOSED IN THE DRAFT IMPACT STATEMENT

Alternate Proposal: I propose that the Kantishna area of the proposed northern extension to Mount McKinley National Park be designated separately from the rest of the Park as an historic/cultural/recreational district in which mining would be permitted under regulation by the Park Service that would protect the wildlife and the environment. Mining would be considered a traditional use of this area which has historic and cultural significance. The National Park Service would conduct an interpretive program featuring early mining history and methods used to extract minerals.

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Justification for the Above Proposal: Although never a "Klondyke," the discovery of gold on Eureka Creek and the subsequent "rush" to the "creeks" in 1905-1910 had much of the drama and romance associated with all early Alaska gold strikes. The area is mineralized and has been prospected and mined by small scale placer and hardrock operations continuously ever since. The last year-round resident, Johnny Busia, who had spent his entire adult life around Eureka Creek, died in Kantishna in 1957. Since then prospecting and mining has been a summer operation and the townsite known as Kantishna has been vandalized, with most of the buildings having been torn down for firewood. Only a few of the early structures remain, and the area has become a repository for abandoned equipment, vehicles, and house trailers. However, Kantishna townsite and the surrounding area could be rejuvenated and restored with additional buildings for administration, a campground, youth hostel (as suggested in the DES), and so forth constructed in a manner as to

blend in with the restoration.

The Kantishna, as the surrounding mining area is called (the actual town of Kantishna was a name later given to the community that developed on the banks of Moose Creek near the original strike on Eureka Creek and was originally known as Eureka Camp), would comprise a relatively small part of the total proposed northern extension of McKinley Park, but would encompass most of the mineralized area between the McKinley River and the Clearwater from the present Park boundary north to include Glacier and Stampede.

However, the objections and the political pressure from the mining industry, the pro-mining attitude of the State of Alaska and the Alaska representatives in Congress plus the special interest groups that advocate all possible economic development and oppose the so-called "locking up" of resources will probably prevail to jeopardize the whole northern extension proposal, if the Kantishna mineralized area is included. If the Kantishna area were to be excluded from the rest of the proposal altogether in order to circumvent opposition, then that area would continue to be blighted by uncontrolled activities associated with prospecting and mining which include multiple access routes across public lands, proliferation of abandoned equipment, disturbance and silting of stream beds, garbage dumps, and indiscriminate and sometimes illegal use of firearms in the name of "protection" and "subsistence." Neither the Bureau of Land Management, nor the State of Alaska, has the powers (or the motivation) to control mining activities.

The Moose Creek drainage and adjacent hills are physiographically a part of the Wonder Lake area. Moose, caribou, bear, fox, beaver and

wolf wander across the boundary to be photographed and watched on the Park side and shot during the hunting season on the other. Moose Creek is one of the few large streams not of glacial origin in the McKinley Park area and therefore runs clear. It affords the only good grayling fishing in or near the Park. The Kantishna hills offer good hiking. At present the area along Moose Creek north of the bridge is used quite extensively by tent campers overflowing from the Park Service Wonder Lake campground. However, this use constitutes a fire hazard and there are no garbage or toilet facilities. In short, the Kantishna valley is already used moderately by outdoor recreationists for camping, fishing, hiking and gold panning by many other than guests of nearby Camp Denali. By being a part of the present Park and under NPS jurisdiction, facilities could be developed to take the load off of the Wonder Lake area (the campground there is a blot on the landscape!) without cluttering up the pristine quality of Wonder Lake and its mountain panorama. Outdoor recreation and mining could co-exist and not be a non-conforming use of the Kantishna area.

Exclusion of the Kantishna area from the proposed Park expansion would re-open the area to State selection and probable small tract development. Patented claims and land already existing would be subject to sale for commercial development not compatible with adjacent Park lands. Commercial development would put additional pressure for use on the existing Park road, or pressure for the proposed Rex to McGrath road which would connect to Kantishna.

As an example of non-compatible use of present mining claims, for two seasons a big game guide leased one of the Glen Creek holdings as a base for his guided hunting operations. This guide had had numerous game violations and convictions in other areas of Alaska and was reputed to have taken illegal animals along and within the Park boundary.

The Alaska Department of Fish and Game is opposing the addition of the proposed northern extension to McKinley Park primarily on the grounds that the management of wildlife could best be done if it were to remain under the jurisdiction of the State.

I challenge that this could be done as well by the State of Alaska as by the National Park Service, not because the State lacks professional expertise, but because the Alaska Department of Fish and Game is primarily concerned with managing wildlife for hunting and trapping, and has little concern with wildlife for aesthetic or non-hunting purposes. The Alaska Department of Fish and Game has had a long record of being manipulated by political pressures and special interest groups, is vulnerable to pressures for wolf control (one of the animal species the northern extension proposes to protect), and could have its management policies changed with the turnover of elected offices in Juneau.

In their opposition to including the northern extension in McKinley Park, the ADFG will no doubt point out that alteration of the landscape in the Kentishna by past and present mining activities disqualifies it for Park status. The designation of the Kentishna as a separate district would circumvent this argument.

Wilderness and Development: Because of the scars of past and present mining activity in the Kantishna, this area could never qualify for wilderness status, as could most of the rest of the northern extension of the Park. To include the Kantishna area under the same management policy as the rest of the northern extension could jeopardize the status of the entire extension.

Both the Master Plan (page 37) and the Draft Environmental Statement (DES) propose a youth hostel, a camp ground, and a ranger station in the Kantishna townsite area. Therefore the impact of administration and the recreational use of the Kantishna area added to that of the existing private facilities (i.e., Camp Denali, the North Face Lodge, Travis cabins, etc.) will significantly increase. A case could be made that the impact of such facilities would be no more than that of mining activities--if mining activities were subject to regulations by the Park Service.

Historical and Cultural Significance: That this area has historical and cultural significance is alluded to, but not developed, in the Impact Statement (page 120) and Master Plan (page 42). Although the strike on Eureka Creek that brought about two thousand gold seekers to the Kantishna in 1905 failed to materialize into another Dawson or Nome bonanza, it was part of the gold rush heritage of the North. Characters such as Fanny Quicley, the Annie Oakley of the Kantishna, and her husband, Joe; Harry Karstens, packer, musher, member of the first successful climb of the south peak of McKinley, and first superintendent of McKinley Park; Little Johnny Rusia from Yugoslavia who lived all his adult life in the Kantishna

and was the last surviving resident; Charley MacGonagal, local miner who was a member of the famous Sourdough ascent of the North Peak; and others such as O. M. Grant, Shorty Warbell and Frank Bunnell left a colorful chapter in the pioneer history of Alaska. Carl Ben Eielson and Joe Crossen, famed early pilots in Alaska, made first flights into the area. Kantishna was the starting point for many of the early (as well as present) climbs on McKinley.

Gold, silver (and now antimony), placer and hardrock mining, using hand panning, sluice boxes and hand rocker methods as well as the more sophisticated ball mill processing, were and are still going on in the area. The miner and prospector, though often destructive of landscape, had an historical place in the saga of frontier Alaska, much as the mountain man, the cowboy, and the logger had in the west and the north woods. Designation of the Kantishna as an historic-cultural district could provide for the continuation of mining as a traditional use of the land compatible with the recreational/educational aims of the National Parks, wildlife preservation, watershed protection of streams, scientific study (minerology and geology), and controlled commercial development for outdoor recreation.

An interpretive center could be placed at the townsite of Kantishna which would display artifacts and minerals of early mining in the area (perhaps using the Fanny Quicley cabin near the airstrip) with a seasonal ranger (perhaps an old timer) demonstrating typical panning and sluice box operations. One stream such as Friday Creek could be designated for recreational panning only.

Legitimate and active mining operations in the area should be placed off limits to the public except at the discretion of the owners. But guided tours that did not impede operations or endanger visitors might be arranged on special schedules. Such a management policy exists elsewhere in the National Park system, i.e. at Canyon DeChelly where Indians live and farm in the Monument as a recognized traditional and cultural part of the area, but not as objects of tourist curiosity.

The townsite of Kantishna is presently owned as a patented homestead. Of the remaining structures those that particularly need preserving are the two story log cabin that was once a roadhouse and the post office; Fanny Quigley's house near the airstrip; Johnny Busia's cabin on the west bank of Moose Creek; and Shorty Harbell's tiny cabin on Friday Creek. Although now in private ownership, all these cabins are used by itinerant summer residents and are deteriorating rapidly with improper care.

The townsite of Kantishna could be restored with integrity and taste with the proposed youth hostel, ranger station, and other buildings being built in such a manner as to simulate the old mining camp. Such developments and use of the area could enhance and augment the rest of the expanded Park, being an historical/cultural/educational enclave in an otherwise predominately wilderness and wildlife national park.

Outdoor Recreation: The Kantishna area would tie in well with the Wonder Lake region as an outdoor recreational district. The latter, which has the only large (approximately 3 miles long) deep water lake in the present Park, is now a destination point for campers, hikers, fishermen, canoeists, photographers and others who simply wish to view the mountains and wildlife. The present campground at the south end of the

lake is an eyesore with terrain unsuitable for tenting.

If the campground were removed to an area north of the townsite of Kantishna, more suitable and protected sites for tenting could be designated, and the people impact and potential pollution of Vonder Lake would be lessened, yet the lake would still be within hiking range of the campground (3-4 miles). The present campground site should be a picnic area only with walk-in access. The launching ramp for boats should be eliminated from the south end and put in at the north end near the culverts to lessen the impact on the loons' nesting area near the present site. The present picnic site at the north end should be retained, with no camping allowed.

The Kantishna-Vonder Lake valley offers the following recreational resources:

Fishing: Moose Creek which flows through the Kantishna townsite provides the best grayling fishing in the McKinley Park area. Vonder Lake offers mediocre lake trout fishing.

Swimming: Although usually too cold, Moose Creek affords a dip for the hardy in backwater pools during warm spells. Once in a while Vonder Lake warms up enough (surface only) to invite a quick swim. Mosquitoes also discourage this sport from becoming very popular.

Boating: Vonder Lake is closed to mechanized boating and should remain so. It does afford pleasant canoeing, small-boat sailing, and rowing (often in connection with trolling). The staff at Camp Denali have rafted Moose Creek from a

point 5 miles upstream from the bridge to Kantishna using rubber life rafts and inner tubes which were packed in to the put-in point. This is cold and can be treacherous in high water. One party is known to have canoed down Moose Creek to the Kantishna River, but not without difficult portages.

Gold-

panning: As mentioned before, the tributary streams of Moose Creek yield "colors" and an occasional small gold nugget to amateur panners.

Hiking: Old roads and the dry ridges of the Kantishna hills afford good hiking, although much of the valley and tundra plains are muskeg. Spectacular views of Denali (the native name for Mt. McKinley) and adjacent peaks can be had from the ridges, although not from the Moose Creek valley or Kantishna townsite.

Berry

picking: The Wonder Lake-Kantishna area offers exceptional cranberry (lowbush), blueberry, and (in some years) currant picking.

Botany: The walk up the Red Top road offers a remarkable range of flowering plants from riverine and wet land types to the arctic alpine plant communities as one ascends the two miles and approximate 1,000 feet of elevation.

Horseback

riding: Although no horses are available in the area, the Mercer Ranch at Lignite (north of Healy) operates a packing and guided horseback-trip service. Mercer has a concession

to operate within the Park and for the past ten years has brought stock in along the north boundary to Kantishna (where he owns a cabin) to support mountain climbing parties up to the Muldrow glacier.

While the use of packstock should be limited in most of the Park to prevent deterioration of the tundra, the old roads and tractor trails along the present north boundary and the Kantishna would afford good riding. If the addition of the southern extension of the Park should preclude aerial support of mountaineering, then the use of horses, especially in the northern approaches, would increase.

Winter
sports:

Cross country skiing in Alaska has become increasingly popular with more and more participants taking extended winter camping tours. Kantishna has become a destination for several ski trips through the Park in March and April. Also, in the past three years several parties per year have taken dog teams through the Park to the Wonder Lake area. This use of the Park in winter, as opposed to snow-machines (prohibited within present Park boundaries), should be encouraged. With increased winter use of the Park, Park Service ski and dog team patrols may increase, and perhaps a winter seasonal ranger should be stationed at Kantishna--at least from February-May--not only because of skiers and dog mushers, but to deter game poaching which has occurred in the past.

Wildlife: The Kantishna area in conjunction with the Wonder Lake area affords good opportunities for wildlife observations, especially if the area were closed to hunting and trapping. All the big animal species in the present Park except Dall sheep are found in this area. Caribou come through the area in early spring and late August, with a concentration of large bulls usually found around Wonder Lake. Since the Kantishna area was opened to hunting after statehood, there has been a marked decline in the number of caribou seen in the area. (However, this may be a result of the diminishing numbers of caribou coming through the Park in general.) Moose have often been observed feeding in Wonder Lake, although their number has declined recently. Both black and grizzly bears use the area, although no black bear (frequently seen formerly) have been sighted in the area recently. Wolves are often sighted as well as red fox. Beaver watching, especially in late August when beavers are preparing their lodge and food supply for winter, is especially rewarding. For a number of years an especially tame pair of loons annually nested and produced young on Wonder Lake. There is a gyrfalcon nest in the area. The ridge behind Camp Denali has had nesting surf birds annually for many years; however, the activity around a recently staked homestead at the east end of the ridge in the nesting area seems to have discouraged them in the past.

year. Golden plovers, whimbrels, willow and rock ptarmigan, osprey, golden eagle, ducks, shorebirds, and song birds afford good birding.

Trapping: As mentioned previously, trapping has been conducted in the Kantishna for the past three winters, although this is poor trapping country. However, with the increased price of furs, the increasing allure of "subsistence" living, and the fact that the Kantishna has recently become an attractive place for the young to winter (8-10 persons having spent winters there in the 1972-74 period) the impact on wildlife can be expected to increase.

Present Land Ownership and Use: At present (1974) there are three patented 5 acre homesites, one patented 65 acre trade and manufacturing site, one headquarter site, 6-7 patented mining claims plus one 5-acre homesite applied for and numerous unpatented mining claims, many of which would not stand a legal challenge, in the Kantishna area.

One of the homesites consists of three small log cabins near the road just across the present park boundary which are used for vacation and hunting purposes. One cabin was occupied all winter 1972/73. Another homesite nearer Moose Creek consists of a small log cabin and since 1973 an addition of two 4-unit module motel structures. The owner of the homesite leased the land to a company which operates a roadside hotel, restaurant, bar and service station just outside the southeast boundary of the Park. The facility, the North Face Lodge, is intended to serve as an overnight stop for tours operated between McKinley Village and Kantishna.

(Just one group of guests used the lodge since it was hauled into place in 1973.) The third homesite constitutes the major part of the township of Kantishna. A fourth homesite has been staked and the patent applied for on the east end of the ridge behind Camp Denali. The building consists of a concrete foundation with a small plywood shack on top surrounded by scattered building material for a larger structure that was flown in by helicopter. (The owner has not yet fulfilled the 5 month continuous residency requirements for patent.)

The sixty-five acre T & M site belongs to Camp Denali which has operated a wilderness resort and an environmental interpretive and back country hiking program for 23 years. The headquarter site one mile east of the camp also belongs to Camp Denali.

Mining: In the past ten years there has been increasing prospecting activity in the Kantishna area which consists mostly of locating claims, stock promotion, leasing and selling of claims, much moving of vehicles and heavy equipment across public lands with considerable scarring of the landscape; but there has been no extraction of ore in commercial quantities except from the three operations mentioned previously (pages 7 and 8) in this critique. It should be noted here that the Craig family operation near Friday Creek has been conducted with a minimum alteration of the landscape and environmental impact. It constitutes a model of how mining can be done efficiently and profitably with negligible damage to the surroundings.

Along Glen Creek, a tributary of Moose Creek approximately 7 miles upstream from the Moose Creek bridge, several stock promotion enterprises

have taken place over the past 15 years without any commercial ore being extracted. However, severe damage to the tundra and stream beds has resulted, including a mile long "airstrip" bulldozed out on permafrost. The "airstrip" soon eroded into deep gullies (muddying Moose Creek) which prevented the airport from ever being used as such. Numerous tractor trails have been pushed along Moose Creek allowing access to ATV's. Much broken down equipment is scattered along the route. Claims have been bought and sold several times.

Another venture has staked association claims along Moose Creek from Kantishna to Glen Creek, despite some of this area being closed to mineral entry by the 1965 administrative withdrawal of 9,000 acres for possible inclusion in the Park. The stockholders have plans to dredge Moose Creek, but have not yet begun operations. USGS reports and others should the prospects for a viable mining operation along Moose Creek as poor.

SUGGESTED MANAGEMENT PLAN FOR THE KANTISHNA DISTRICT

1. No hunting or trapping except as a management measure under the jurisdiction of the NPS.
2. Mount McKinley National Park and subsequent extensions shall be closed to mining and mineral entry except in the designated Kantishna Historical District and the Tonzona extension (Alternative B3) if this area is included in the expanded Park.

(I would personally prefer that this be limited to existing patented claims, but allowing the development of bona fide other claims (see #3 below) might have to be a bargaining point with opponents of the whole northern extension.)
3. A designated board of competent geologists made up from the U.S. Geological Survey and the State Department of Geology shall examine each mineral claim to determine on a cost-benefit basis the prospect of producing ore on an economic scale.
4. The National Park Service shall have jurisdiction as to the type and location of access to valid claims and to the location of any buildings that might be necessary in the development of any mine.
5. Whenever possible the movement of heavy equipment and tracked vehicles will be done over snow when the ground is frozen with no resulting disturbance of the ground underneath.
6. All placer mining operations shall use settling ponds to eliminate the silting of clear water streams. No chemical pollutants shall be released into any streams.

7. All garbage and refuse shall be disposed of in a manner prescribed by the NPS so as not to constitute an eyesore or attract wildlife.
8. Movement of heavy equipment or hauling in heavy trucks shall take place over the 'McKinley Park' road only during hours when the tour and shuttle busses are not operating.
9. A museum or exhibit of early mining equipment artifacts of the Kantishna gold camp and a mineral display should be located in Kantishna as a part of an interpretive program of early mining in Alaska. A ranger-historian assigned to the area should conduct demonstrations of early mining techniques (i.e. the use of gold pans, rocker boxes, sluice boxes, etc.). Visitor participation in actual panning operations on one of the creeks could be conducted by a ranger or a concessioner. The history of mining and various methods used to extract minerals in the early days of mining in Alaska should be a feature of the interpretive program.
10. A tent camping area, picnic grounds, and a seasonal ranger in residence should be located in the Kantishna area.
11. The townsite of Kantishna should be restored with administration buildings, campsites, and other buildings blending in to the overall integrity of the re-created gold camp. The proposed youth hostel could be tent cabins.
12. Hiking, camping, fishing, horseback riding and recreational gold-panning at designated areas should be recognized as compatible uses of the area.

13. The increasing popularity of cross country skiing and dog teaming should prompt a consideration of maintaining a shelter at Kantishna for those making trips through the Park by this means in the winter and spring. Winter patrols by the NPS by dogteam and ski should be encouraged. Stationing a seasonal ranger or technician at Kantishna part of the winter should be considered.
14. The Kantishna Historical District shall be closed to the use of snowmachines and other ATV's.
15. The landing of small aircraft at the existing Kantishna airstrip should be allowed to continue, but an access road from the north should be discouraged.

Submitted by Ginny Hill Wood
Backroads Trail
Fairbanks Alaska 99701
June 1974

SUMMARY OF CRITIQUE OF THE DRAFT ENVIRONMENTAL STATEMENT
FOR MOUNT MCKINLEY NATIONAL PARK

I RECOMMEND:

- (1) That both the northern and southern extensions as proposed by the Draft Environmental Statement on page 3 (map) be enacted, EXCEPT that Alternative Proposal B5, page 175 (area north of present NE section of the Park); Alternative B8, page 183 (area west of present park around Tonzona River and Amos Lakes); and Alternative B9, page 185 (Chelatna Lakes) be added to the above extensions.
- (2) That the Yanert River valley east of the present Park boundary be added to the region proposed for a Cooperative Planning and Management Zone.
- (3) That mining be prohibited in the present Park and proposed extensions EXCEPT that in the Kantishna area, which shall be designated an historical/cultural/recreational district of the Park, mining and related activities shall be permitted under regulations by the National Park Service which would protect wildlife, environmental, and aesthetic values of the area.
- (4) That hunting and trapping be prohibited in all proposed extensions of Mt. McKinley National Park EXCEPT as a management tool under NPS supervision.

- (5) That construction of the proposed Rex to McGrath road (slated to begin 1975) be stopped until final disposition is made of the proposed northern extension of the Park. This road would bisect much of that proposed extension causing considerable impact.
- (6) That the proposed Cooperative Planning and Management Zone include managing that section of the Fairbanks-Anchorage Highway between the Rex Bridge across the Nenana River and the Susitna River bridge just south of the Denali State Park as a Scenic Highway with restrictions placed on kinds of development along it that would keep this section of the highway aesthetically pleasing to the motorist.
- (7) That the Kantishna mining area be designated separately from the proposed Northern Extension of Mt. McKinley National Park and managed as an Historical/Cultural/Recreational area with mining recognized as a compatible and traditional activity, but regulated by the NPS to protect landscapes and wildlife. An interpretive-educational program based on early mining history and methods should be established by the NPS at the old townsite of Kantishna.

Alternate
proposal not
included in
(ES)

Submitted by Ginny Hill Wood

June 1974

RESPONSE TO COMMENTS BY
GINNY HILL WOOD

1. A topographic map has been included in the final EIS.
2. In order not to go beyond the bounds of legitimate NPS interest in what occurs on lands adjacent to one of its areas, the Cooperative Planning and Management Zone was designed to include only those lands which constitute the foreground scene and access to the park. These are the lands which a visitor to the park would normally see or be associated with as he comes to visit the park. As such, his experience while he is in this zone will be directly associated with his park experience. Inclusion of the Yanert Valley was considered but not done because of the foregoing rationale.
3. These sections have been revised and reorganized, and now reflect the distinction between recreation and tourism. See Chapter II, Sections 5 and 6.
4. The value of the minerals extracted can be readily calculated from the weights given, multiplied by the current market value of each mineral. Since values are changing constantly, the text does not include this calculation.
5. Some statements in the text regarding the continuation of mining were in error and have been deleted or amended. New mineral entry will be precluded but existing valid claims will be recognized.
6. This error has been corrected. There are 15 patented claims. The chart on page 78 refers to the entire proposal area.
7. The text has been revised for clarity.
8. The effect of mining operations on wildlife is recognized in the text. Note that the original statement was that "little further effect" would result.
9. The statement has been amended.
10. Correction has been made to indicate the ongoing use of this strip.

11. This section has been amended.
12. The statement has been revised.
13. This information has been included. We regret the oversight, and appreciate your calling it to our attention. Reference to the North Face Lodge has been added to the text.
14. See comment and response 86, Alaska State letter. Valid existing holdings will not be affected. The NPS plans to continue air access for mountain climbing parties.
15. This information is found in Chapter II, Section 6, "Regional Recreational Opportunities."
16. This additional recreational consideration has been included.
17. No action has been taken by the NPS on this withdrawal, which is still in effect.
18. The proposal expressed here in great detail is not an alternative to the Secretary's proposal for Kantishna that appears in the Master Plan, but a clarification in greater detail of the intent of that proposal. Mining will not be encouraged, although valid existing rights will be recognized. It is hoped that cooperation between the NPS and mine operators will bring about the utilization of the interpretive potential of this area. NPS appreciates the very valuable material provided and will utilize it in future planning efforts.

3084 6th Street
Boulder, CO 80302
3 July 1974

Theodor R. Swem
Chairman, Alaska Planning Group
Room 1345
U.S. Department of the Interior
Washington, DC 20240

Dear Mr. Swem:

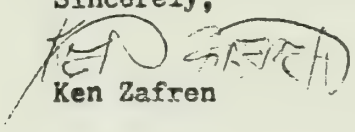
This is a comment on DES 73-83 Proposed: Mount McKinley
National Park, Alaska.

The impacts of excluding from the proposal lands within the
area of ecological concern, especially mining districts, Chelatna
Lake and the caribou calving area near Lake Minchumina should
be discussed.

The alternative of co-operative management areas in the two
western parts of the area of ecological concern should be
considered.

All maps should show the boundaries of the areas of ecological
concern.

Sincerely,


Ken Zafren

] 1
] 2
] 3

RESPONSE TO COMMENTS BY
KEN ZAFREN

1. Since this EIS discusses the impact of including lands, the discussion you suggest is beyond the responsibility of this document. See the response to comment 1, Wilderness Society letter, this chapter.
2. It is thought that the ecological values of these areas can be best protected through inclusion in AEC rather than the CPMZ, which is mainly oriented toward developmental concerns.
3. It is our feeling that the delineation of the AEC's on the proposal map would be sufficient for proper understanding of their location in relation to the main proposal, and would avoid confusion from excessive detail on other maps.

Mercer Ranch - Lignite
Healy, Alaska 99743
January 4, 1974

Senator Ted Stevens

Congressman Don Young

Gentlemen:

I shall try to be brief and to the point. There is presently a large land withdrawal along the north side of Mt. McKinley National Park for the hopes of including it within the boundary of such park.

Some of this area is extremely high in valueable minerals and need to be left available for mining. The most of this area is much more scenic than the area in the park that is traversed by the road. This area north of the park is the home of a variety of wildlife and also the home of many varieties of plant life not readily found within the present boundaries. However I am very bitterly oposed to this area being enclosed within the Park unless there is a guarantee it will be available for mining and have readily access by the public for its viewing and pleasures of visiting. Over the past twenty years Mt. McKinley Park has been being converted from a public use park to mainly a huge domain for a few self proclaimed naturalists, monopolist profiteers and littering novice mountaineers (so it seems to me). To me that should not be the purpose of National Parks, there should be more purposes than to create bureau salaried empires, private viewing land withholdings and monetary profits.

I suggest that the government be required to rebuild the State constructed road known as the Lignite-Stampede Pioneer Access Road and extend it on over the old "tractor trail" to the present Glenn Creek Mine Road and on to the Park road at the boundary near Wonder Lake. The most of this route is already scarred with present inferior roads but traverses some of the most scenic area in Interior Alaska. This would then allow for a one way circle route for the tourist riders on the mandatory busses (and not a back trip over the same boring present route) and could be made in an easy one day trip. This new north route would be in an easy construction area. It could be designed for two way traffic, which would then allow for more access to the mining areas and could allow for private auto use on the new section of the Park Road System, even if the old present Park Road was retained for one-way traffic. I have been over this north area by plane a number of times and have traveled the proposed road route and adjacent area dozens and dozens of times with tourist horse pack trips and am well acquainted with it as well as the area in the Park. If you are interested I can furnish you with much more information and might be able to arrange a ground trip over this area for you, so you can see for yourselves the pros and cons.

In the mean time I shall do all I can to oppose the addition of this north area to the Park until we are assured of decent public access to it.

Sincerely yours,



Berle E. Mercer

June 6, 1974

207 N.W. "D" St.
Bentonville, Ark.
72712

Chairman
Alaska Planning Group
U.S. Department of the Interior •
Washington, D.C. 20240

Dear Sir:

I understand that your Group is currently studying some twenty-eight projects involving the inclusion of Federally-owned lands in the National Park, Wildlife Refuge, Forest and Wild and Scenic River Systems.

I would like to support the maximum protection of the natural environment in the areas under study. Perhaps I'll never put my canoe into any of the streams or hike through any of the hills, but I will be a happier man, knowing we have had the wisdom to protect and preserve them.

Yours,



Steve L. Marquess

APPENDIX A

LAWS RELATING TO MOUNT MC KINLEY NATIONAL PARK

Established Feb. 26, 1917.

Boundary Changes: Jan. 30, 1922; Mar. 19, 1932.

Mount McKinley National Park

Act of February 26, 1917, establishing Mount McKinley National Park...
 Act of May 21, 1928, repealing the proviso of section 6 and last proviso of section 7 of act of February 26, 1917, relative to limitation on appropriations for, and killing of game for food in, Mount McKinley National Park.....
 Act of January 30, 1922, adding certain lands to Mount McKinley National Park.....
 Joint resolution of June 14, 1930, providing for the naming of a prominent mountain or peak within Mount McKinley National Park in honor of Carl Ben Eielson.....
 Excerpt from act of January 26, 1931, to provide for uniform administration of the national parks, authorizing the prescribing of regulations for surface use of mineral lands within Mount McKinley National Park...
 Act of March 19, 1932, revising the boundary of Mount McKinley National Park.....

An Act To establish the Mount McKinley National Park, in the Territory of Alaska, approved February 26, 1917 (39 Stat. 938)

Mount McKinley,
National Park,
Alaska, estab-
lished.

Description.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the tract of land in the Territory of Alaska particularly described by and included within the metes and bounds, to wit: Beginning at a point as shown on Plate III, reconnaissance map of the Mount McKinley region, Alaska, prepared in the Geological Survey, edition of nineteen hundred and eleven, said point being at the summit of a hill between two forks of the headwaters of the Toklat River, approximate latitude sixty-three degrees forty-seven minutes, longitude one hundred and fifty degrees twenty minutes; thence south six degrees twenty minutes west nineteen miles; thence south sixty-eight degrees west sixty miles; thence in a southeasterly direction approximately twenty-eight miles to the summit of Mount Russell; thence in a northeasterly direction approximately eighty-nine miles to a point twenty-five miles due south of a point due east of the point of beginning; thence due north twenty-five miles to said point; thence due west twenty-eight and one-half miles to the point of beginning, is hereby reserved and withdrawn from settlement, occupancy, or disposal under the laws of the United States, and said tract is dedicated and set apart as a public park for the benefit and enjoyment of the people, under the name of the Mount McKinley National Park. (U.S.C., title 16, sec. 347.)

Existing entries,
etc., not im-
paired. (Amend-
ed by 46 Stat.
1043. See p.
203.)

SEC. 2. That nothing herein contained shall affect any valid existing claim, location, or entry under the land laws of the United States, whether for homestead, min-

LEGISLATION RELATING TO NATIONAL PARKS

eral, right of way, or any other purpose whatsoever, or shall affect the rights of any such claimant, locator, or entryman to the full use and enjoyment of his land. (U.S.C., title 16, sec. 348.)

SEC. 3. That whenever consistent with the primary purposes of the park, the Act of February fifteenth, nineteen hundred and one, applicable to the location of rights of way in certain national parks and national forests for irrigation and other purposes, shall be and remain applicable to the lands included within the park. (U.S.C., title 16, sec. 349.)

Rights of way.
Vol. 31, p. 790.

SEC. 4. Nothing in this Act shall in any way modify or affect the mineral land laws now applicable to the lands in the said park. (U.S.C., title 16, sec. 350.)

Mineral land
laws not affected.

SEC. 5. That the said park shall be under the executive control of the Secretary of the Interior, and it shall be the duty of the said executive authority, as soon as practicable, to make and publish such rules and regulations not inconsistent with the laws of the United States as the said authority may deem necessary or proper for the care, protection, management, and improvement of the same, the said regulations being primarily aimed at the freest use of the said park for recreation purposes by the public and for the preservation of animals, birds, and fish and for the preservation of the natural curiosities and scenic beauties thereof. (U.S.C., title 16, sec. 351.)

Regulations of
control, etc.

SEC. 6. That the said park shall be, and is hereby, established as a game refuge, and no person shall kill any game in said park except under an order from the Secretary of the Interior for the protection of persons or to protect or prevent the extermination of other animals or birds: *Provided*, That prospectors and miners engaged in prospecting or mining in said park may take and kill therein so much game or birds as may be needed for their actual necessities when short of food; but in no case shall animals or birds be killed in said park for sale or removal therefrom, or wantonly. (U.S.C., title 16, sec. 352.)

Game refuge
established.

SEC. 7. That the said Secretary of the Interior may, in his discretion, execute leases to parcels of ground not exceeding twenty acres in extent for periods not to exceed twenty years whenever such ground is necessary for the erection of establishments for the accommodation of visitors; may grant such other necessary privileges and concessions as he deems wise for the accommodation of visitors; and may likewise arrange for the removal of such mature or dead or down timber as he may deem necessary and advisable for the protection and improvement of the park: *Provided*, That no appropriation for the maintenance of said park in excess of \$10,000 annually shall be made unless the same shall have first been expressly authorized by law. (U.S.C., title 16, sec. 353.)

Proviso.

Killing for food
permitted. (Re-
pealed by 45
Stat. 622. See
p. 202.)

Leases for accom-
modations for
visitors (Amend-
ed by 39 Stat.
535, as amended.
See pp. 9-12.)

Proviso.
Limit on appro-
priations. (Re-
pealed by 45
Stat. 622. See
p. 202.)

SEC. 8. That any person found guilty of violating any of the provisions of this Act shall be deemed guilty of a

Punishment for
violations.

LAWS FOR NAT. PARK SERVICE, PARKS, & MONUMENTS

misdemeanor, and shall be subjected to a fine of not more than \$500 or imprisonment not exceeding six months, or both, and be adjudged to pay all costs of the proceedings. (U.S.C., title 16, sec. 354.)

An Act To repeal the proviso of section 6 and the last proviso of section 7 of "An Act to establish the Mount McKinley National Park in the Territory of Alaska," approved February 26, 1917, approved May 21, 1928 (45 Stat. 622)

Mount McKinley National Park, Alaska.

Limit on appropriations for, repealed.

Vol. 39, p. 939, repealed. See p. 201.

Provision allowing killing of game for food in, repealed.

Vol. 39, p. 939, repealed. See p. 201.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the last proviso of section 7 of an Act entitled "An Act to establish the Mount McKinley National Park, in the Territory of Alaska," approved February 26, 1917, which is in the words and figures following: "*Provided*, That no appropriation for the maintenance of said park in excess of \$10,000 annually shall be made, unless the same shall have first been expressly authorized by law," be, and the same is hereby, repealed.

SEC. 2. That the proviso of section 6 of an Act entitled "An Act to establish the Mount McKinley National Park, in the Territory of Alaska," approved February 26, 1917, which is in the words and figures following: "*Provided*, That prospectors and miners engaged in prospecting or mining in said park may take and kill therein so much game or birds as may be needed for their actual necessities when short of food; but in no case shall animals or birds be killed in said park for sale or removal therefrom, or wantonly," be, and the same is hereby repealed. (U.S.C., title 16, 6th supp., sec. 352, 353.)

An Act To add certain lands to Mount McKinley National Park, Alaska, approved January 30, 1922 (42 Stat. 359)

Mount McKinley National Park, Alaska.
Lands added to.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the south, east, and north boundaries of the Mount McKinley National Park are hereby changed as follows: Beginning at the summit of Mount Russell, which is the present southwest corner of the park; thence in a northeasterly direction one hundred miles, more or less, to a point on the one hundred and forty-ninth meridian, which is twenty-five miles south of a point due east of the upper northwest corner of the park; thence north along the one hundred and forty-ninth meridian twenty-five miles; thence west forty miles, more or less, to the present upper northwest corner of Mount McKinley National Park. And all these lands lying between the above-described boundary and the present south, east, and north boundaries are hereby reserved and withdrawn from settlement, occupancy, or disposal, and under the laws of the United States said lands are hereby made a part of and included in the Mount McKinley National Park; and all the provisions of the Act to

LEGISLATION RELATING TO NATIONAL PARKS

establish Mount McKinley National Park, Alaska, and for other purposes, approved February 26, 1917, are hereby made applicable to and extended over lands hereby added to the park. (U.S.C., title 16, sec. 347.)

Vol. 39, p. 938.
See p. 200.

Joint Resolution To provide for the naming of a prominent mountain or peak within the boundaries of Mount McKinley National Park, Alaska, in honor of Carl Ben Eielson, approved June 14, 1930 (46 Stat. 588)

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That a mountain or peak, unofficially known as Copper Mountain, located at the headwaters of the Mount McKinley River, lying in a northeasterly direction from Mount McKinley in the Mount McKinley National Park, Alaska, is hereby permanently named Mount Eielson in honor of the pioneer work in aviation performed in Alaska and the North by Carl Ben Eielson.

Mount Eielson,
Alaska.

Mountain in
Mount McKinley
National Park
named in honor
of Carl Ben
Eielson.

Excerpt from "An Act To provide for uniform administration of the national parks by the United States Department of the Interior, and for other purposes," approved January 26, 1931 (46 Stat. 1043)

SEC. 2. That hereafter the Secretary of the Interior shall have authority to prescribe regulations for the surface use of any mineral land locations already made or that may hereafter be made within the boundaries of Mount McKinley National Park, in the Territory of Alaska, and he may require registration of all prospectors and miners who enter the park: *Provided*, That no resident of the United States who is qualified under the mining laws of the United States applicable to Alaska shall be denied entrance to the park for the purpose of prospecting or mining. (U.S.C., 6th supp., title 16, sec. 350a.)

Mount McKinley,
Alaska.
Regulations for
surface use of
mineral lands
within.
(Amends sec. 2,
Vol. 39, p. 938.
See p. 200.)
Registration of
miners, etc.
Provido.

Entries.

An Act To revise the boundary of the Mount McKinley National Park, in the Territory of Alaska, and for other purposes, approved March 19, 1932 (47 Stat. 68)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the boundary of the Mount McKinley National Park is hereby changed so as to read as follows:

Beginning at the summit of a hill between the Toklat River and the Clearwater Fork of that river at an approximate latitude of sixty-three degrees forty-seven minutes forty-five seconds, longitude one hundred and fifty degrees seventeen minutes forty seconds, which is intended to be same point of beginning of the boundary description as contained in the Act of February 26, 1917; thence southerly along the summit of the ridge between Toklat River and the Clearwater Fork of said river and across Stony Creek at its confluence with the said Clearwater Fork to the summit of the ridge between Stony Creek and the Clearwater Fork of the Toklat River; thence following the summit of said ridge and the sum-

Mount McKinley
National Park,
Alaska.
Boundary
changed.
Vol. 39, p. 938.
See p. 200.

Description.

LAWS FOR NAT. PARK SERVICE, PARKS, & MONUMENTS

mit of the ridge between the tributaries of said Clearwater Fork, the headwaters of the North Fork of Moose Creek and Boundary Creek to the intersection with the present boundary of Mount McKinley National Park at approximate latitude of sixty-three degrees thirty-two minutes forty-five seconds, longitude one hundred and fifty degrees twenty-four minutes forty-five seconds; thence southwesterly fourteen and three-tenths miles, more or less, to a point one-half mile north of Wonder Lake on the stream flowing out of Wonder Lake into Moose Creek; thence south sixty-eight degrees west forty-three and five-tenths miles, more or less, to the point of intersection with the southwest boundary extended; thence southeasterly thirty-three miles, more or less, to the summit of Mount Russell; thence in a northeasterly direction following the present south boundary approximately eighty-eight miles to Windy Creek at approximate latitude sixty-three degrees twenty-five minutes forty-five seconds, longitude one hundred and forty-nine degrees one minute thirty-five seconds; thence easterly following the north bank of Windy Creek to the western boundary of The Alaska Railroad right of way; thence northerly following the west boundary of The Alaska Railroad right of way to a point due east of the present north boundary of the park as extended due east; thence due west following the present north boundary of the park to the summit of the ridge between Toklat River and the Clearwater Fork of said river; thence southerly following the summit of said ridge to the place of beginning: *Provided, however*, That such isolated tracts of land lying east of The Alaska Railroad right of way and the west bank of the Nenana River between the north bank of Windy Creek and the north park boundary as extended eastward are also included in said park: *Provided further*, That nothing herein contained shall affect any valid existing claim, location, or entry under the land laws of the United States, whether for homestead, mineral, right of way, or any other purpose whatsoever, or shall affect the rights of any such claimant, locator, or entryman to the full use and enjoyment of his land. (U.S.C., 6th supp., title 16, sec. 355.)

Proviso.
Isolated tracts of
land included.

Valid existing
claims, etc., not
affected.

National park
provisions made
applicable.
Vol. 39, p. 938;
Vol. 39, p. 535.
See pp. 200 and
9.

SEC. 2. That the provisions of the Act of August 25, 1916, entitled "An Act to establish a national park service, and for other purposes," and the Act of February 26, 1917, entitled "An Act to establish the Mount McKinley National Park, in the Territory of Alaska," together with all Acts supplementary to and amendatory of said Acts are made applicable to and extended over the lands hereby added to the park. (U.S.C., 6th supp., title 16, sec. 355a.)

Mount McKinley National Park

Accommodations for housing, feeding, and transporting visitors and residents.....Act of March 29, 1940

An Act To amend the Act authorizing the President of the United States to locate, construct, and operate railroads in the Territory of Alaska, and for other purposes, approved March 29, 1940 (54 Stat. 80)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 1 of the Act to authorize the President of the United States to locate, construct, and operate railroads in the Territory of Alaska, and for other purposes, approved March 12, 1914 (38 Stat. 305), as amended, be, and the same is hereby, amended by adding thereto the following:

48 U.S.C. secs.
301-305, 307.

Mount McKinley
National Park,
Alaska.
Tourist
facilities, etc.
Appropriation
authorized.

Purchase of
Mount McKinley
Tourist and
Transportation
Co., equities,
etc.

Motor vehicles.

"That in order to provide for the adequate housing, feeding, and transportation of the visiting public and residents of Mount McKinley National Park in Alaska, there is authorized to be appropriated out of the general funds of the Treasury a sum not to exceed the sum of \$30,000; and the President of the United States be, and he is hereby, authorized and empowered, through such agency or agencies as he may designate, to construct, reconstruct, maintain, and operate lodges, and other structures and appurtenances incident thereto; to purchase, upon such terms as he may deem proper, the personal property, structures, and buildings of the Mount McKinley Tourist and Transportation Company that are operated and used in said park under contract authorization by the Department of the Interior, and the equities of the Mount McKinley Tourist and Transportation Company in the business developed and conducted in connection therewith; to purchase or otherwise acquire motor-propelled passenger-carrying vehicles and all necessary fixtures and equipment, and to operate, repair, recondition, and maintain the same in order to carry out the purpose of this Act, notwithstanding the restrictions imposed by law with regard to the purchase, maintenance, repair, or operation of motor-propelled, passenger-carrying vehicles; and to operate or sell the equipment and facilities herein authorized, directly or by contract or contracts with any individual, company, firm, or corporation, under such schedule of rates, terms, and conditions, as he may deem proper." (16 U.S.C. sec 353a.)

Mount McKinley National Park

Receipts for fiscal years 1957, 1958, and 1959 from the operation of McKinley Park Hotel in park to be applied to costs of managing, operating, and maintaining hotel-----Excerpts from Acts of June 13, 1956
-----July 1, 1957
-----and June 4, 1958
Authority of the United States in Mount McKinley National Park not affected by admission of the State of Alaska into the Union-----
-----Excerpt from Act of July 7, 1958

Excerpt from "An Act Making appropriations for the Department of the Interior and related agencies for the fiscal year ending June 30, 1957, and for other purposes," approved June 13, 1956 (70 Stat. 257, 263)

* * * * *

ADMINISTRATIVE PROVISIONS

Appropriations for the National Park Service shall be available for the purchase of not to exceed one hundred and ten passenger motor vehicles of which one hundred and nine shall be for replacement only, including not to exceed seventeen for replacing United States Park Police cruisers; and the objects and purposes specified in the Acts of August 8, 1953 (67 Stat. 495, 496) and July 1, 1955 (69 Stat. 242): *Provided*, That all receipts for the fiscal year 1957 from the operation of the McKinley Park Hotel in Mount McKinley National Park, Alaska, may be applied to, or offset against, costs of managing, operating, and maintaining the hotel and related facilities, and any receipts or other revenues in excess of such costs shall be deposited at least annually into the Treasury of the United States as miscellaneous receipts.

16 U.S.C. 1b-d
18f.

Excerpt from "An Act Making appropriations for the Department of the Interior and related agencies for the fiscal year ending June 30, 1958, and for other purposes," approved July 1, 1957 (71 Stat. 257, 263)

* * * * *

ADMINISTRATIVE PROVISIONS

Appropriations for the National Park Service shall be available for the purchase of not to exceed one hundred and seventeen passenger motor vehicles for replacement only, including not to exceed seventeen for replacing United States Park Police cruisers; and the objects and purposes specified in the Acts of August 8, 1953 (16 U.S.C. 1b-1d) and July 1, 1955 (16 U.S.C. 18f): *Provided*, That all receipts for the fiscal year 1958 from the operation of the McKinley Park Hotel in Mount McKinley National Park, Alaska, may be applied to, or offset against, costs of managing, operating, and main-

67 Stat. 495,
496; 69 Stat.
242.

II. NATIONAL PARKS—MOUNT MCKINLEY

taining the hotel and related facilities, and any receipts or other revenues in excess of such costs shall be deposited at least annually into the Treasury of the United States as miscellaneous receipts.

Excerpt from "An Act Making appropriations for the Department of the Interior and related agencies for the fiscal year ending June 30, 1959, and for other purposes," approved June 4, 1958 (72 Stat. 155, 161)

* * * * *

ADMINISTRATIVE PROVISIONS

67 Stat. 495,
496; 69 Stat.
242.

Appropriations for the National Park Service shall be available for the purchase of not to exceed eighty-four passenger motor vehicles for replacement only, including not to exceed seventeen for replacing United States Park Police cruisers; purchase of one aircraft; and the objects and purposes specified in the Acts of August 8, 1953 (16 U.S.C. 1b-1d) and July 1, 1955 (16 U.S.C. 18f): *Provided*, That all receipts for the fiscal year 1959 from the operation of the McKinley Park Hotel in Mount McKinley National Park, Alaska, may be applied to, or offset against, costs of managing, operating, and maintaining the hotel and related facilities, and any receipt or other revenues in excess of such costs shall be deposited at least annually into the Treasury of the United States as miscellaneous receipts.

Excerpt from "An Act To provide for the admission of the State of Alaska into the Union," approved July 7, 1958 (72 Stat. 339, 347)

* * * * *

Mount
McKinley
National Park.

SEC. 11. (a) Nothing in this Act shall affect the establishment, or the right, ownership, and authority of the United States in Mount McKinley National Park, as now or hereafter constituted; but exclusive jurisdiction, in all cases, shall be exercised by the United States for the national park, as now or hereafter constituted; saving, however, to the State of Alaska the right to serve civil or criminal process within the limits of the aforesaid park in suits or prosecutions for or on account of rights acquired, obligations incurred, or crimes committed in said State, but outside of said park; and saving further to the said State the right to tax persons and corporations, their franchises and property on the lands included in said park; and saving also to the persons residing now or hereafter in such area the right to vote at all elections held within the respective political subdivisions of their residence in which the park is situated. (48 U.S.C. prec. § 21 note.)

APPENDIX B

HISTORIC NATIVE PLACES IN THE VICINITY OF MOUNT MC KINLEY NATIONAL PARK

The following material is reproduced from *Alaska Natives and the Land* (Federal Field Committee, 1968). The list includes places reported to be associated historically with present Native groups in the area. (See attached tables).

HISTORIC NATIVE PLACES AND CURRENT STATUS UPPER KUSKOKWIM REGION

Native Group	Historic Places	Existing Settlement Populations	Status	Seasonal Camp Site	Abandoned
		25-299 300-999 1000+	Unknown		

Ingalik

One of the westernmost divisions of the Athapascan linguistic stock, located between Anvik and Holy Cross on the lower Yukon River including the drainage of the Anvik River and the region southeast to the Kuskokwim River including its drainage above Georgetown.

Subdivisions: Osgood (1934) makes the following:

- (1) Anvik-Shageluk group, centering around the villages bearing these names.
- (2) Bonasila group, centering around the village of the same name.
- (3) Holy Cross-Georgetown group, centering around the villages bearing those names.
- (4) McGrath group, the people of the drainage of the upper Kuskokwim River; this group somewhat arbitrarily constructed.

Their settlements in this region were:

Holy Cross-Georgetown group

Akmiut, on the left bank of the Kuskokwim River near mouth of Holokuk River (61°31'N, 158°35'W). Reported in 1898.

Native Group	Historic Places	Existing Settlement Populations	Status Unknown	Seasonal Camp Site	Abandoned
		25-299 300-999 1000+			
	<i>Napai</i> , on the north bank of Kuskokwim River. Present-day Napaimiut, an existing place with a population of 10 on the right bank of the Kuskokwim, 28 miles east of Aniak-Eskimo-Indian village. Population of 60 in 1880.	less			
	<i>Kwigiapainukamiut</i> , Eskimo-Ingalik village the site of 1833 Russian trading settlement. Kolmakov's Redoubled built in 1841 across the Kuskokwim River from this site.				X
	<i>Georgetown</i> , on right bank of Kuskokwim River, 16 miles northwest of village of Red Devil and 22 miles northwest of Sleetmute. Trading post reported here in 1910. Present place.	X	X		
	<i>Crooked Creek</i> , on north bank of Kuskokwim River just east of junction with Crooked Creek. Var. Parents. Village and trading post established at site of small, old Indian village.	X			
	<i>Red Devil</i> , on left bank of Kuskokwim six miles northwest of Sleetmute. Present place.	X			
	<i>Sleetmute</i> , on east bank of the Kuskokwim River, approximately 1.5 miles north of its junction with the Holitna River. Reported as an Eskimo village in 1907, however, Hosley reports that the Ingalik did move as far south as Sleetmute also.	X			
	<i>Stoney River</i> , on north bank of the Kuskokwim, north of its junction with Stoney				

Native Group	Historic Places	Existing Settlement Populations	Status Unknown	Seasonal Camp Site	Abandoned
		25-299 300-999 1000+			

River. Originally called Moose village, also site of trading post and riverboat landing. First located 1.5 miles upstream from present location.

X

Canoe Village, on the west bank of the Kuskokwim, 5.5 miles south of Crooked Creek.

X

Oskawalik, on right bank of the Kuskokwim opposite the mouth of the Oskawalik River, 8 miles southwest of Crooked Creek. This Indian camp was reported in 1913.

X

Itulilik, on east bank of the Holitna River, 22 miles south of Sleetmute. This camp or settlement is reportedly now abandoned. Cited in 1902 manuscript.

X

McGrath group

A northern Athapascan group situated on the upper Kuskokwim River in central Alaska. There is evidence which indicates the present group is an amalgamation of at least two earlier societies, and they show strongest connections with the Intalik of the Lower Yukon River. Their settlements in this region were:

Nikolai, at junction of South Fork Kuskokwim and Little Tonzona Rivers, 46 miles east of McGrath. Moved at this location in 1925 from "*Old Nikolai*."

X

Old Nikolai, twenty-five miles up the South Fork from present-day Nikolai. The people moved from here in 1925.

X

Native Group	Historic Places	Existing Settlement Populations	Status Unknown	Seasonal Camp Site	Abandoned
	<i>Medfra</i> , on the right bank of the Kuskokwim. Var. Berrys Landing. A trading post for many years, in early times it may have been an Indian camp.	X 25-299 300-999 1000+			
	<i>Big River</i> , at the mouth of the Big River at its junction with Middle Fork Kuskokwim. Abandoned within the last 40 or 50 years and people probably moved to Nikolai.				X
	<i>Slow Fork</i> , on Slow Fork Kuskokwim River; location unknown but may be at ruins where Slow Fork junctions with East Fork. Abandoned within the last 40 or 50 years and people moved to Nikolai.				X
	<i>Tonzona</i> , on the Tonzona River near Slow Fork area. Abandoned within the last 40 or 50 years and people moved to Nikolai or Telida.				X
	<i>Takotna</i> , on the Takotna River just above McGrath. Abandoned within the last 40 or 50 years and people moved.				X
	<i>Salmon River village</i> , on the Salmon River east of Big River. Abandoned within the last 40 or 50 years and people probably moved to Nikolai.				X
	<i>Nixon Fork of the Takotna</i> . Location unknown. Abandoned within the last 40 or 50 years.				X

Native Group	Historic Places	Existing Settlement Populations	Status	Seasonal Camp Site	Abandoned
		25-299 300-999 1000+	Unknown		
	<i>Vinasale</i> , on left bank of the Kuskokwim River, 20 miles south of McGrath. Indian village and later a trading post. Reported by Zagoskin in 1842-44. Reportedly abandoned about 1935. The population in 1890 was 140.		X		
	<i>McGrath</i> , on left bank of the Kuskokwim opposite junction of Takotna River. Present place.	X			
	<i>Old McGrath</i> , on the right bank of the Kuskokwim opposite the present-day McGrath.				X
	<i>Telida</i> , presently located on the left bank of Swift Fork Kuskokwim River, 50 miles northeast of Medfra. First reported in 1899; however, established at its present location since 1916.	less			
	<i>Old Telida</i> , located more towards Lake Minchumina than present-day Telida and first reported in 1899 with a population of 17.		X		
Tanana	A division of the Athapascan and inhabiting primarily the Tanana Region; however, some did come into this region and settle at Minchumina Lake. Their settlement was:				
	<i>Minchumina Lake</i> , on the northwest shore of Minchumina Lake. First reported in 1844. It is a present place.	less			
Tanaina	These people are also referred to as the " <i>Lime Hills</i> " people and are a division of the Athapascan. Their village in this region is:				

Native Group	Historic Places	Existing Settlement Populations	Status Unknown	Seasonal Camp Site	Abandoned
	<i>Lime Hills</i> , left bank of Stoney River, near junction of Hungry Creek. Var. Hungry Village.	25-299 300-999 1000+ X			
Eskimo	There are two Eskimo villages, both apparently abandoned, at the southernmost end of this region and are probably isolated places of the Kuskwogmiut. They are: <i>Mogamut</i> , on east bank of Holitna River, 50 miles southwest of Sleetmute. This Eskimo settlement or camp was cited in 1902 manuscript of a local prospector. <i>Kashegelok</i> , on right bank of the Holitna River, opposite mouth of Chukowan River, 64 miles southwest of Sleetmute. This Eskimo village was reported by a prospector who wintered here in 1902-03.		X		
Tanana	A northern division of the Athapascan linguistic family, formerly erroneously classed among the Kutchin tribes, the area inhabited by them includes the drainage of the lower Tanana River below the Tok River, the region about the confluence of the Tanana and Yukon, and the region along the latter river above the confluence (Osgood, 1936). Their settlements were: <i>Clatchotin</i> , no further information available, on the Tanana River. Location unknown. <i>Huntlatin</i> , on the Tanana River, no further information or location available.		X		

Native Group	Historic Places	Existing Settlement Populations 25-299 300-999 1000+	Status Unknown	Seasonal Camp Site	Abandoned
	<i>Nuklukayet</i> , a rendezvous for Tanana, Kutchin and Koyukuk tribes, on the north bank of the Yukon just below the mouth of the Tanana. A former Indian trading camp and settlement on the right bank of the Yukon near the junction with the Tanana. This is an old village site in existence prior to 1869. Var. Nu-cha-la-woy-ya ("between the rivers"). Population in 1880 - 27; population in 1890 - 120. Part of present day Tanana.	X			
	<i>Nukluktana</i> , on the Tanana River just below Tutlut (Tuklat or Kantishna) River.			X	
	<i>Tatsa</i> , on the Yukon River. No further information available.		X		
	<i>Toiwatin</i> , on Tanana River. No further information available.		X		
	<i>Tozikakat</i> , north bank of the Yukon at the mouth of Tozi River. Former Indian village reported by Petroff in 1880 Census. Now a region of several fish camps.			X	
	<i>Tutlut</i> , at the junction of the Kantishna and Tanana Rivers, Minto Flats. Var. Toodlok. Reported by Petroff in 1880 and by Schwatka in 1885.				X
	<i>Weare</i> , at the mouth of the Tanana River, Tanana/Nuklukayet area, 1/2 mile below Tanana trading post of North American Trading & Transportation Company. Indians of Tanana and Kutchin about this junction. Part of present-day Tanana.	X			

Native Group	Historic Places	Existing Settlement Populations	Status Unknown	Seasonal Camp Site	Abandoned
	<i>Tortella</i> , near mouth of the Nenana River, probably at or near present village of Nenana. Former Tanana Indian village reported in 1902.	X			
	<i>Minto</i> , on east bank of the Tanana, 44 miles west of Fairbanks. Name reported in 1909.	X			
	<i>Tolovana</i> , on right bank of the Tanana River, near mouth of Tolovana River. (Var. Hootana). Name reported in 1903.		X		
	<i>Baker's</i> , small settlement on right bank of the Tanana River, at the mouth of Baker Creek associated with Baker telegraph station.		X		
	<i>Cos Jacket</i> (var. Coshaget, Cosna), on the left bank of the Tanana at the mouth of Cosna River. Reported as Tanana village 1899 by Lt. Herron. "Cosna" telegraph station near here 1903.			X	
	<i>Mansfield Village</i> , south of Lake Mansfield, six miles northwest of Tanacross. Cited by Hrdlicka as a better known village of the Tanana. Other authority lacking.			X	

The Tanana Native population appears to have always been scarce; Petroff in 1880 thought the total number to be 700 or 800, Brooks in 1898 thought there to be less than 400, Dall thought about 150. Brooks in 1898 reported the largest villages were at the mouth of the Cantwell and Toclat Rivers.

Native Group	Historic Places	Existing Settlement Populations	Status	Seasonal Camp Site	Abandoned
576		25-299 300-999 1000+	Unknown		

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Compilation by David M. Hickok, Federal Field Committee for Development Planning in Alaska.

APPENDIX C

MAMMALS, AMPHIBIANS, FISHES, AND BIRDS OF MOUNT MCKINLEY

(mammals from Murie, 1962) (amphibians and fishes from
park wildlife observation files) (birds from Murie, 1963)

Common Name

Scientific Name

MAMMALS:

Masked shrew	<i>Sorex cinereus</i>
Dusky shrew	<i>Sorex obscurus</i>
Arctic shrew	<i>Sorex arcticus</i>
Pygmy shrew	<i>Microsorex hoyi</i>
Bat	<i>Myotis lucifugus</i>
Collared pika	<i>Ochotona collaris</i>
Snowshoe rabbit (Varying hare)	<i>Lepus americanus</i>
Hoary marmot	<i>Marmota calligata</i>
Arctic ground squirrel	<i>Citellus parryi</i>
Red squirrel	<i>Tamiasciurus hudsonicus</i>
Northern flying squirrel	<i>Glaucomys sabrinus</i>
Beaver	<i>Castor canadensis</i>
Brown lemming	<i>Lemmus trimucronatus</i>
Bog lemming	<i>Synaptomys borealis</i>
Northern red-backed mouse	<i>Clethrionomys rutilus</i>
Meadow vole	<i>Microtus pennsylvanicus</i>
Chestnut-cheeked vole	<i>Microtus xanthognathus</i>
Tundra vole	<i>Microtus oeconomus</i>
Alaska vole	<i>Microtus miurus</i>
Muskrat	<i>Ondatra zibethicus</i>
Porcupine	<i>Erithizon dorsatum</i>
Coyote	<i>Canus latrans</i>
Wolf	<i>Canus lupus</i> *
Red fox	<i>Vulpes fulva</i>
Black bear	<i>Ursus americana</i>
Grizzly bear	<i>Ursus arctos</i> *
Marten	<i>Martes americana</i>
Short-tailed weasel	<i>Mustela erminea</i>
Least weasel	<i>Mustela rixosa</i>
Mink	<i>Mustela vison</i>
Wolverine	<i>Gulo luscus</i>
River otter	<i>Lutra canadensis</i>
Lynx	<i>Lynx canadensis</i>
Moose	<i>Alces alces</i>
Barren ground caribou	<i>Rangifer articus</i>
Mountain goat	<i>Oreamnos americanus</i>
Dall sheep (White sheep)	<i>Ovis dalli</i>

Common Name

Scientific Name

AMPHIBIANS:

Wood frog

Rana sylvatica

FISHES:

Arctic grayling

Thymallus arcticus

Blackfish

Dallia pectoralis

Broad Whitefish

Coregonus nasus

Burbot

Lota lota

Dolly varden

Salvelinus malma

Humpback whitefish

Coregonus pidschiza

Lake chub

Hybopsis plumbea

Lake trout

Salvelinus namaycush

Longnose sucker

Catostomus catostomus

Northern pike

Esox lucius

Rainbow trout

Salmo quairdneri

Red salmon

Oncorhynchus nerka

Round whitefish

Prosopium cylindroceum

Three-spined stickleback

Gasterosteus aculeatus

Sculpin

Cottus cognatus

BIRDS:

Blackbird, rusty

Euphagus carolinus

Brant, black

Branta nigricans

Bufflehead

Bucephale albeola

Bunting, snow

Plectrophenax nivalis

Canvasback

Aythya valisineria

Chickadee, black-capped

Parus atricapillus turneri

Chickadee, boreal

Parus hudsonicus

Chickadee, gray-headed

Parus cinctus

Crane, sandhill

Grus canadensis

Creeper, brown

Certhia familiaris montana

Crossbill, white-winged

Loxia leucoptera

Dipper (Water ouzel)

Cinclus mexicanus unicolor

Dowitcher, long-billed

Limnodromus scolopaceus

Duck, harlequin

Histrionicus histrionicus

Eagle, bald

Haliaeetus leucocephalus alascanus

Eagle, golden

Aquila chrysaetos canadensis

Finch, gray-crowned rosy

Leucosticte tephrocotis littoralis

Flicker, yellow-shafted

Colaptes auratus borealis

Flycatcher, olive-sided

Nuttallornis borealis

Gadwell

Anas strepera

Grebe, red-necked

Podiceps grisegena holbollii

Grebe, horned

Podiceps auritus cornutus

Goose, Canada

Branta canadensis

Goose, lesser snow

Chen hyperborea hyperborea

Goose, white-fronted

Anser albifrons

Grosbeak, pine

Pinicola enucleator alascanis

Grouse, spruce

Canachites canadensis osgoodi

Grouse, ruffed

Bonasa umbellus yukonensis

Common Name

Scientific Name

BIRDS - continued

Goldeneye, Barrow's	<i>Bucephala islandica</i>
Goldeneye, common	<i>Bucephala clangula americana</i>
Goshawk	<i>Accipiter gentilia atricapillus</i>
Gull, Bonaparte's	<i>Larus philadelphia</i>
Gull, herring	<i>Larus argentatus smithsonianus</i>
Gull, mew (Short-billed)	<i>Larus canus brachyrhynchus</i>
Gyr Falcon	<i>Falco rusticolus</i>
Hawk, Harlan's	<i>Buteo harlani</i>
Hawk, marsh	<i>Circus cyaneus hudsonius</i>
Hawk, pigeon	<i>Falco columbarius bendirei</i>
Hawk, red-tailed	<i>Buteo jamaicensis calurus</i>
Hawk, rough-legged	<i>Buteo lagopus s. johannis</i>
Hawk, sharp-shinned	<i>Accipiter striatus velox</i>
Hawk, sparrow	<i>Falco sparverius</i>
Hawk, Swainson's	<i>Buteo swainsoni</i>
Jaeger, long-tailed	<i>Stercorarius longicaudus</i>
Jay, gray (Camprobber)	<i>Perisoreus canadensis pacificus</i>
Junco, slate-colored	<i>Junco hyemalis</i>
Kingfisher, belted	<i>Megaceryle alcyon caurina</i>
Kinglet, ruby-crowned	<i>Regulus calendula</i>
Lark, horned	<i>Eremophila alpestris arctica</i>
Longspur, lapland	<i>Calcarius lapponicus alasensis</i>
Loon, arctic (Pacific)	<i>Gavia arctica pacifica</i>
Loon, common	<i>Gavia immer</i>
Loon, red-throated	<i>Gavia stellata</i>
Loon, yellow-billed	<i>Gavia adamsii</i>
Magpie, black-billed	<i>Pica pica hudsonia</i>
Mallard	<i>Anas platyrhynchos</i>
Merganser, red-breasted	<i>Mergus serrator</i>
Oldsquaw	<i>Clangula hyemalis</i>
Owl, boreal	<i>Aegolius funereus richardsoni</i>
Owl, great gray	<i>Strix nebulosa</i>
Owl, great horned	<i>Bubo virginianus lagophonus</i>
Owl, hawk	<i>Surnia ulula caparoch</i>
Owl, short-eared	<i>Asio flammeus</i>
Owl, snowy	<i>Nyctea scandiaca</i>
Pewee, western	<i>Contopus sordidulus veliei</i>
Phalarope, northern	<i>Lobipes labatus</i>
Phoebe, Say's	<i>Sayornis saya yuonensis</i>
Pintail	<i>Anas acuta</i>
Pipit, water	<i>Anthus spinoletta pacificus</i>
Plover, American golden	<i>Pluvialis dominica fluva</i>
Plover, semipalmated	<i>Charadrius semipalmatus</i>
Plover, upland	<i>Bartramia longicauda</i>
Ptarmigan, rock	<i>Lagopus mutus nelsoni</i>
Ptarmigan, white-tailed	<i>Lagopus leucurus peninsularis</i>

Common Name

Scientific Name

BIRDS - continued

Ptarmigan, willow	<i>Lagopus lagopus alascensis</i>
Raven, common	<i>Corvus corax principalis</i>
Redhead	<i>Athya americana</i>
Redpoll, common	<i>Acanthis flammea</i>
Robin	<i>Turdus migratorius</i>
Sandpiper, Baird's	<i>Erolia bairdii</i>
Sandpiper, dunlin	<i>Erolia alpina pacifica</i>
Sandpiper, least	<i>Erolia minutilla</i>
Sandpiper, solitary	<i>Tringa solitaria cinnamomea</i>
Sandpiper, spotted	<i>Artitis macularia</i>
Sandpiper, western	<i>Ereunetes mauri</i>
Scaup, greater	<i>Aythya marila nearctica</i>
Scaup, lesser	<i>Aythya affinis</i>
Scoter, surf	<i>Melanitta perspicillata</i>
Scoter, white-winged	<i>Melanitta deglandi dixonii</i>
Shrike, northern	<i>Lanius excubitor invictus</i>
Shoveler, spoonbill	<i>Spatula clypeata</i>
Snipe, common	<i>Capella gallinago delicata</i>
Solitaire, Townsend's	<i>Myadestes townsendi</i>
Sparrow, fox	<i>Passerella iliaca zaboria</i>
Sparrow, golden-crowned	<i>Zonotrichia atricapilla</i>
Sparrow, Lincoln's	<i>Melospiza lincolnii</i>
Sparrow, savannah	<i>Passerculus sandwichensis anthinus</i>
Sparrow, tree	<i>Spizella arborea ochracea</i>
Sparrow, white-crowned	<i>Zonotrichia leucophrys gambelii</i>
Surfbird**	<i>Aphriza virgata</i>
Swallow, barn	<i>Hirundo rustica erythrogaster</i>
Swallow, bank	<i>Riparia riparia</i>
Swallow, cliff	<i>Petrochelidon pyrrhonota hypopolia</i>
Swallow, tree	<i>Iridoprocne bicolor</i>
Swallow, violet-green	<i>Tachycineta thalassina lepida</i>
Swan, whistling	<i>Olor columbianus</i>
Tattler, wandering	<i>Heteroscelus incanum</i>
Teal, green-winged	<i>Anas carolinensis</i>
Teal, blue-winged	<i>Anas discors</i>
Tern, arctic	<i>Sterna paradisaea</i>
Thrush, gray-cheeked	<i>Hylocichla minima</i>
Thrush, hermit	<i>Hylocichla guttata</i>
Thrush, Swainson's	<i>Hylocichla usulata incana</i>
Thrush, varied	<i>Ixoreus naevius meruloides</i>
Warbler, arctic	<i>Phylloscopus borealis kennicotti</i>
Warbler, blackpoll	<i>Dendroica striata</i>
Warbler, myrtle	<i>Dendroica coronata hooveri</i>
Warbler, orange-crowned	<i>Vermivora celata</i>
Warbler, yellow	<i>Dendroica petechia amnicola</i>
Warbler, Wilson's	<i>Wilsonia pusilla pileolata</i>

Common Name

Scientific Name

BIRDS - continued

Waterthrush, northern

Seiurus noveboracensis notabilis

Waxwing, bohemian

Bombycilla garrula pallidiceps

Wheatear

Oenanthe oenanthe

Whimbrel, hudsonian curlew

Numenius phaeopus hudsonicus

Widgeon, american

Mareca americana

Woodpecker, blackbacked three-toed

Picoides arcticus

Woodpecker, downy

Dendrocopus pubescens nelsoni

Woodpecker, hairy

Dendrocopus villosus septentrionalis

Woodpecker, northern three-toed

Picoides tridactylus fasciatus

Yellowlegs, greater

Totanus melanoleucus

Yellowlegs, lesser

Totanus flavipes

* Endangered in lower 48 States but not in Alaska.

** Rare in Alaska but not in lower 48 States.



APPENDIX D

MOUNT MCKINLEY NATIONAL PARK

PLANT LIST

This list is essentially that compiled earlier by Louise Murie from the works of Eric Hulten, Aven Nelson, William Weber, Herbert Hanso, and Adolph Murie to which has been added species recently placed in the Park's herbarium. The objective here has been to scientifically list all of the plants thus far brought to our attention, and in addition give their common names whenever possible, as shown in *Flora of Alaska* (1959) by Anderson, and in *Standardized Plant Names* (1942) by Kelsey & Dayton.

SCIENTIFIC NAMES

COMMON NAMES

Anderson

Standardized

PTERIDOPHYTA

FERN, HORSETAIL, CLUB-MOSS

POLYPODIACEAE

FERN FAMILY

<i>Cystopteris</i>		<i>Bladderfern</i>
fragilis	Fragile-fern	Brittle-Bladderfern
montana	Mountain Cystopteris	
<i>Dryopteris</i>		<i>Woodfern</i>
austriaca	Spreading Wood-fern	
fragrans	Fragrant Shield-fern	
linneana	Oak-fern	Oakfern
phegopteris	Beechfern	Narrow Beechfern
<i>Woodsia</i>		<i>Woodsia</i>
alpina	Alpine Woodsia	
ilvensis	Rusty Woodsia	Rusty Woodsia

OPHIOGLOSSACEAE

ADDER'S-TONGUE FAMILY

<i>Botrychium</i>		<i>Grapefern</i>
boreale	Northern Grape-fern	
lunarea	Moonwort	Moonwort

EQUISETACEAE

HORSETAIL FAMILY

<i>Equisetum</i>		Horsetail
arvense	Common Horsetail	Field Horsetail
limosum	Swamp Horsetail	Swamp Horsetail
pratense	Thicket or Meadow Horsetail	Meadow Horsetail
scirpoides	Little Horsetail	Sedgelike Horsetail
sylvaticum	Wood H.; Bottle-brush	Sylvan Horsetail
variegatum	Northern Scouring-rush	Variegated Horsetail

LYCOPODIACEAE

CLUB-MOSS FAMILY

<i>Lycopodium</i>		<i>Clubmoss</i>
alpinum	Alpine Club-Moss	
annotinum	Stiff Club-moss	
(var. pungens)		

SCIENTIFIC NAME	COMMON NAMES	
	<i>Anderson</i>	<i>Standardized</i>
LYCOPODIACEAE	CLUB-MOSS FAMILY	
<i>clavatum</i>	Running Pine	Runningpine
<i>complanatum</i>	Ground Cedar	Groundcedar (Crowfoot)
<i>selago</i>	Fir Club-moss	Fir Clubmoss

SPERMATOPHYTA SEED-BEARING PLANTS

PINACEAE	PINE FAMILY	
<i>Juniperus</i>	-----	<i>Juniper</i>
<i>communis</i>	-----	Common Juniper
(Var. <i>montana</i>)	Low Juniper	-----
<i>Larix</i>	-----	<i>Larch</i>
<i>laricina</i>	Tamarack	Eastern Larch; Tamarack
<i>Picea</i>	-----	<i>Spruce</i>
<i>glauca</i>	White Spruce	White Spruce
<i>mariana</i>	Black Spruce	Black Spruce

SPARGANIACEAE	BUR-REED FAMILY	
<i>Sparganium</i>	-----	<i>Burreed</i>
<i>angustifolium</i>	Narrow-leaved Bur-reed	Narrowleaf Burreed
<i>hyperboreum</i>	Northern Bur-reed	-----

POTOMOGETONACEAE	PONDWEED FAMILY	
<i>Potamogeton</i>	-----	<i>Pondweed</i>
<i>alpinus</i>	Northern Pondweed	-----
<i>filiformis</i>	Filiform Pondweed	-----
<i>perfoliatus</i>	Clasping-leaved Pondweed	Thoroughwort Pondweed

SCHEUCHZERIAACEAE	ARROW-GRASS FAMILY	
<i>Triglochin</i>	-----	<i>Podgrass</i>
<i>palustre</i>	Marsh Arrow-grass	Arrow Podgrass

GRAMINAE	GRASS FAMILY	
<i>Agropyron</i>	-----	<i>Wheatgrass</i>
<i>latiglume</i>	-----	-----
<i>trachycaulum</i>	Slender Wheat-grass	-----
<i>Agrostis</i>	-----	<i>Bentgrass</i>
<i>scabra</i>	Ticklegrass	-----
<i>Alopercurus</i>	-----	<i>Foxtail</i>
<i>aequalis</i>	Short-awned Foxtail	Shortawn Foxtail
<i>alpinus</i>	Mountain Foxtail	Alpine Foxtail
<i>Arctagrostis</i>	-----	<i>Genus not listed</i>
<i>latifolia</i>	Arctagrostis	-----
(var. <i>arundinacea</i>)	-----	-----
<i>Aristida</i>	-----	<i>Threeawn</i>
<i>purpurea</i>	-----	Purple Threeawn

SCIENTIFIC NAMES

COMMON NAMES

*Anderson**Standardized*

GRAMINAE

GRASS FAMILY

<i>Becamania</i>	-----	<i>Sloughgrass</i>
syzigachne	Slough-grass	American Sloughgrass
<i>Bromus</i>	-----	<i>Brome</i>
pumpellianus	Arctic Bromegrass	Pumpelly Brome
(var. arcticus)		
(var. villisissimus)		
<i>Calamagrostis</i>	-----	<i>Reedgrass</i>
canadensis	Bluejoint	Bluejoint Reedgrass
langsдорffii	-----	-----
purpurescens	Purple Reedgrass	Purple Pinegrass
<i>Deschampsia</i>	-----	<i>Hairgrass</i>
caespitosa	Tufted Hair-grass	Tufted Hairgrass
<i>Elymus</i>	-----	<i>Wildrye</i>
brachyantherum	Meadow Barley	-----
innovatus	Downy Rye-Grass	Fuzzyspike Wildrye
<i>Festuca</i>	-----	<i>Fescue</i>
altaica	Rough Fescue	-----
brachyphylla	Alpine Fescue	Sheep Fescue
saximontana	-----	-----
rubra	Red Fescue	Red Fescue
richardsonii	-----	-----
<i>Glyceria</i>	-----	<i>Mannagrass</i>
striata	Fowl Manna-grass	Fowl Mannagrass
<i>Hierochloa</i>	-----	<i>Sweetgrass</i>
alpina	Alpine Holy-grass	Alpine Sweetgrass
odorata	Holy-grass; Sweet-grass	Sweetgrass
<i>Hordeum</i>	-----	<i>Barley</i>
jubatum	Squirrel-tail Barley	Foxtail Barley
<i>Phleum</i>	-----	<i>Timothy</i>
alpinum	Mountain Timothy	Alpine Timothy
<i>Poa</i>	-----	<i>Bluegrass</i>
alpigena	Kentucky Bluegrass	-----
alpina	Alpine Bluegrass	Alpine Bluegrass
vivipara	-----	-----
glauca	Glaucous Spear-grass	Greenland Bluegrass
lanata	Lanate Bluegrass	-----
palustris	-----	Fowl Bluegrass
pratensis	Kentucky Bluegrass	Kentucky Bluegrass
<i>Trisetum</i>	-----	<i>Trisetum</i>
spicatum	Downy Oat-grass	Spike Trisetum

CYPERACEAE

SEDGE FAMILY

<i>Carex</i>	-----	<i>Sedge</i>
angarea	-----	-----
aquatilis	Water Sedge	Water Sedge
atrata (atrosquama)	Black-scaled Sedge	Black Sedge
atrofusca	Dark-brown sedge	-----
atrosquama (atrata)	Black-scaled sedge	-----
aurea	Gold-fruited Sedge	Golden Sedge
bigelowii	Bigelow Sedge	-----
bipartata	Arctic Hare's-foot Sedge	-----

SCIENTIFIC NAMES

COMMON NAMES

Anderson

Standardized

CYPERACEAE

SEDGE FAMILY

<i>canescens</i>	Silvery Sedge	.....
<i>capillaris</i>	Hair-like Sedge	.....
<i>capitata</i>	Capitate Sedge	.....
<i>circinata</i>	Coiled Sedge	.....
<i>cocinna</i>	Low Northern Sedge	.....
<i>kokrinensis</i>	Kokrines Mountain Sedge	.....
<i>leptalea</i>	Bristle-stalked Sedge	.....
<i>lugens</i>	.....	.....
<i>macloviana</i>	Thick-headed Sedge	.....
<i>media</i> (?)	.....	.....
<i>membranacea</i>	Fragile Sedge	.....
<i>montanensis</i>	Montana Sedge	.....
<i>norvegica</i>	Norway Sedge	.....
<i>inferappina</i>	.....	.....
<i>petricosa</i>	.....	.....
<i>physocarpa</i>	.....	.....
<i>podocarpa</i>	Short-stalk Sedge	.....
<i>praticola</i>	Meadow Sedge	.....
<i>rotundata</i>	Round-fruited Sedge	.....
<i>sciropoidea</i>	Northern Single-spike Sedge	.....
<i>spectabilis</i> (Hanson & Lepage)	Showy Sedge	.....
<i>stylosa</i>	Variegated Sedge	.....
<i>tenuiflora</i>	Sparse-flowered Sedge	.....
<i>vaginata</i>	Sheathed Sedge	.....
<i>Eriphorum</i>	.....	<i>Cottonsedge</i>
<i>augustifolium</i>	Tall Cotton-grass	<i>Narrowleaf Cottonsedge</i>
<i>brachyantherum</i>	Close-sheathed Cotton-grass	.....
<i>callitrix</i>	Arctic Cotton-grass	.....
<i>chamissonis</i>	Russet Cotton-grass	.....
<i>scheuchzeri</i>	White Cotton-grass	.....
<i>vaginatum</i>	Niggerheads, Sheathed Ctgr.	.....
<i>Kobresia</i>	.....	<i>Genus not listed</i>
<i>myosuroides</i>	Bellard Kobresia	.....
<i>simpliciuscula</i>	.....	.....
<i>Scirpus</i>	.....	<i>Bulrush</i>
<i>caespitosus</i>	Tufted Club-rush	<i>Deerhair Bulrush</i>
<i>paucifloris</i>	Few-flowered Club-rush	.....

JUNCACEAE

RUSH FAMILY

<i>Juncus</i>	.....	<i>Rush</i>
<i>arcticus</i>	Arctic Rush	.....

SCIENTIFIC NAMES		COMMON NAMES
	<i>Anderson</i>	<i>Standardized</i>
JUNCACEAE	RUSH FAMILY	
<i>alaskanus</i>	-----	-----
<i>biglumis</i>	Two-flowered Rush	-----
<i>castaneus</i>	Chestnut Rush	-----
<i>filiformis</i>	Thread Rush	-----
<i>triglumis</i>	Three-flowered Rush	-----
<i>Luzula</i>	-----	<i>Woodrush</i>
<i>confusa</i>	Northern Wood-Rush	-----
<i>multiflora</i>	Many-flowered Wood-Rush	-----
<i>parviflora</i>	Small-flowered Wood-Rush	Millet Woodrush
<i>rufescens</i>	Hairy Wood-Rush	-----
<i>spicata</i>	Spiked Wood-Rush	Spike Woodrush
MELANTHACEAE	BUNCHFLOWER FAMILY	
<i>Tofieldia</i>	-----	<i>Tofieldia</i>
<i>coccinea</i>	Northern Asphodel	-----
<i>pusilla</i>	Scotch Asphodel, False Asph.	-----
<i>Zygadenus</i>	-----	<i>Deathcamas</i>
<i>elegans</i>	Glaucus Zygadenus	Mountain Deathcamas
LILIACEAE	LILY FAMILY	
<i>Lloydia</i>	-----	<i>Alplily</i>
<i>serotina</i>	Alp Lily	Common Alplily
CONVALERIACEAE	LILY OF THE VALLEY FAMILY	
<i>Streptopus</i>	-----	<i>Twistedstalk</i>
<i>amplexifolius</i>	Cucumber-root, Clasping Twisted-stalk	Claspleaf Twistedstalk
ORCHIDACEAE	ORCHID FAMILY	
<i>Corallorrhiza</i>	-----	<i>Coralroot</i>
<i>trifida</i>	Early Coral-root	Early Coralroot
<i>Coeleglossum</i>	-----	<i>Habenaria</i>
<i>viride</i>	Long-bracted Orchid	-----
<i>bracteatum</i>	-----	Satyr Habenaria
<i>Cypripedium</i>	-----	<i>Ladyslipper</i>
<i>guttatum</i>	Pink Ladies' Slipper	-----
<i>passcrinum</i>	Northern Ladies' Slipper	-----
<i>Listera</i>	-----	<i>Listera</i>
<i>borealis</i>	Northern Twayblade	-----
<i>Orchis</i>	-----	<i>Orchis</i>
<i>rotundifolia</i>	Round-leaved Orchis	Roundleaf Orchis

SCIENTIFIC NAMES

COMMON NAMES

*Anderson**Standardized*

ORCHIDACEAE

ORCHID FAMILY (Cont.)

Platanthera or
Limnorchis or
Habenaria

dilitata
hyperborea
obtusata

Spiranthes
romanzoffiana

White Bog-orchid
Northern Bog-orchid
Small Northern Bog-orchid

Hooded Ladies' Tresses

Habenaria

White Bog-orchid
Northern Green Habenaria

Ladiestresses

Continental Ladiestresses

SALICACEAE

WILLOW FAMILY

Populus

tacamahacca
tremuloides
trichocarpa

Balsam Poplar
Quaking Aspen
Black cottonwood

Poplar; Aspen; Cottonwood

Tacamahac Poplar
Quaking Aspen
California Poplar or
Black Cottonwood

*Salix**Not treated in Anderson**Willow**Petrides*

alaxensis
(var. longistylis)
arbusculoides
arbutifolia
arctica
barclayi
barrattiana
bebbiana
brachycarpa
mexiae
farrae
walpolei
glauca
myrtilifolia
(var. pseudomyr-
sinites)
nyphoclada
phlebophylla
polaris
pseudopolaris
pulchra
reticulata
(var. gigantifolia)

Feltleaf Willow
Baretwig Feltleaf Willow
Gladtooth Willow
Baikal Dwarf Willow
Arctic Dwarf Willow
Coast Willow
Tundra Willow
Oliveleaf Willow
Barrenground Willow
Alaska Willow
Grayleaf Willow
Myrtleleaf Dwarf Willow
Upright Myrtleleaf Willow
Narrowleaf Willow
Straits Dwarf Willow
Polar Dwarf Willow
Deadleaf Willow
Netvein Dwarf Willow

Feltleaf Willow
Littletree Willow
Arctic Willow
Barclay Willow
Barratt Willow
Bebb Willow
Barrenground Willow
Farr Willow
Walpole Willow
Greyleaf Willow
Blueberry Willow
Blueberry Willow
Mouseleaf Willow
Polar Willow
Netleaf Willow

SCIENTIFIC NAMES

COMMON NAMES

*Petrides**Standardized*

SALICACEAE

WILLOW FAMILY (CONT.)

<i>richardsonii</i>	Moose Willow	Richardson Willow
<i>rotundifolia</i>	Least Dwarf Willow	Least Willow
<i>setchelliana</i>	Gravelbar Dwarf Willow	Setchell Willow
<i>scouleriana</i>	Scouler Willow	Scouler Willow
<i>torulosa</i>	Bigleaf Dwarf Willow	-----

Anderson

BETULACEAE

BIRCH FAMILY

<i>Alnus</i>	-----	<i>Alder</i>
<i>crispa</i>	Green Alder	American Green Alder
<i>fruticosa</i>	Alaska Alder	Manchu Alder
<i>Betula</i>	-----	<i>Birch</i>
<i>glandulosa</i>	Glandular Scrub Birch	Bog Birch
" x <i>nana</i>	Hybrid of above and Dwarf	-----
<i>exilis</i>	Alpine Birch	-----
<i>glandulosa</i> x <i>resinifera</i>	Hybrid of Glandular Scrub and Alaska Birch	-----
<i>kenai</i> x <i>nana</i>	Hybrid of Kenai and Dwarf	-----
<i>exilis</i>	Alpine Birch	-----
<i>kenai</i> x <i>resinifera</i>	Hybrid of Kenai and Alaska Birch	-----
<i>nana</i>	Dwarf Alpine Birch	Dwarf Arctic Birch
<i>nana exilis</i> x <i>resinifera</i>	Hybrid of Dwarf Alpine and Alaska Birch	-----

SANTALACEAE

SANDALWOOD FAMILY

<i>Comandra</i>	-----	<i>Comandra</i>
<i>livida</i>	Northern Comandra	Northern Comandra

POLYGONACEAE

BUCKWHEAT FAMILY

<i>Chenopodium</i>	-----	<i>Goosefoot</i>
<i>album</i>	Lamb's Quarters	Lamb's Quarters Goosefoot
<i>capitatum</i>	Strawberry Spinach	Blite Goosefoot
<i>Koenigia</i>	-----	<i>Genus not listed</i>
<i>islandica</i>	Koenigia	-----
<i>Oxyria</i>	-----	<i>Mountainsorrel</i>
<i>digyna</i>	Mountain Sorrel	Alpine Mountainsorrel
<i>Polygonum</i>	-----	<i>Knotweed</i>
<i>alaskanum</i>	Wild Rhubarb	-----
<i>bistorta</i>	Mountain Meadow Bistort	European Bistort
<i>heterophyllum</i>	Various-leaved Knotweed	-----

SCIENTIFIC NAMES		COMMON NAMES
	<i>Anderson</i>	<i>Standardized</i>
POLYGONACEAE	BUCKWHEAT FAMILY (CONT.)	
viviparum	Alpine Bistort	Viviparous Bistort
<i>Rumex</i>	-----	<i>Dock</i>
acetosa	Alpestris Green Sorrel	Garden Sorrel
arcticus	Arctic Dock	-----
fenestratus	Greatwestern Dock	-----
PORTULACACEAE	PURSLANE FAMILY	
<i>Claytonia</i>	-----	<i>Springbeauty</i>
acutifolia	Bering Sea Spring Beauty	-----
graminifolia		
sarmentosa	Alaska Spring Beauty	-----
scammaniana	Scamman Spring Beauty	-----
sibirica	Siberian Spring Beauty	-----
tuberosa	Tuberous Spring Beauty	Tuber Springbeauty
CARYOPHYLLACEAE	PINK FAMILY	
<i>Arenaria</i>	-----	<i>Sandwort</i>
humifusa	Low Sandwort	-----
physoides	Merckia	-----
<i>Cerastium</i>	-----	<i>Cerastium</i>
beeringianum	Beering Chickweed	-----
fischerianum	Fischer Chickweed	-----
<i>Melandrium</i> or		
<i>Lychnis</i>	-----	<i>Campion</i>
apetalum	Nodding Lychnis	Campion
furcatum	Arctic Lychnis	-----
macrosporum	Large-seeded Lychnis	-----
<i>Minuartia</i> or		
<i>Arenaria</i>	-----	<i>Sandwort</i>
arctica	Arctic Sandwort	-----
elegans (A. rosii)	Ross Sandwort	-----
macrocarpa	Long-podded Sandwort	-----
obtusifolia	Alpine Sandwort	-----
rubella	-----	-----
stricta	Rock Sandwort	Rock Sandwort
<i>Moehringia</i> or		
<i>Arenaria</i>	-----	<i>Sandwort</i>
lateriflora	Blunt-leaved Sandwort	Bluntleaf Sandwort
<i>Silene</i>	-----	<i>Silene</i>
acaulis	Moss campion; Moss Pink	Moss Silene
subacaulescens	-----	-----
repens	Pink Campion	-----
williamsii	Williams Campion	-----

SCIENTIFIC NAMES

COMMON NAMES

Anderson

Standardized

CARYOPHYLLACEAE

PINK FAMILY (CONT.)

<i>Spergula</i>	-----	<i>Spurry</i>
arvensis	Spurry	Corn Spurry
<i>Stellaria</i>	-----	<i>Starwort</i>
calycantha	-----	-----
crassifolia	Fleshy Starwort	-----
longipes	Long-stalked Starwort	Longstalk Starwort
(var. edwardsii)	-----	-----
media	Common Chickweed	Chickweed

NYMPHACEAE

WATER-LILY FAMILY

<i>Nephar</i>	-----	<i>Cowlily</i>
polysepalum	Yellow Pond Lily	Rocky Mt. Cowlily

RANUNCULACEAE

CROWFOOT FAMILY

<i>Aconitum</i>	-----	<i>Monkshood</i>
delphinifolium	Delphinium-leaved Aconite	-----
chamissonianum	-----	-----
<i>Actaea</i>	-----	<i>Baneberry</i>
arguta or rubra	Red Baneberry	Red Baneberry
<i>Anemone</i>	-----	<i>Anemone</i>
multiceps	Alaska Blue Anemone	-----
multifida	Cut-leaved Anemone	Argentine Anemone
narcissiflora	Narcissus-flowered Anemone	Narcissus Anemone
siberica	-----	-----
parviflora	Northern Anemone	Arctic Anemone
patens	-----	Spreading Pasqueflower
multifida	Pasque-flower; Wild Crocus	-----
richardsonii	Yellow Anemone	-----
<i>Caltha</i>	-----	<i>Marshmarigold</i>
palustris	Yellow Marsh Marigold	Common Marshmarigold
(var. arctica)	-----	-----
asarifolia	-----	-----
<i>Delphinium</i>	-----	<i>Larkspur</i>
brachycentrum	Northern Dwarf Larkspur	-----
glaucum	Glaucus Larkspur	Sierra Larkspur
nutans (hybrid of above two - ?)	-----	-----
<i>Ranunculus</i>	-----	<i>Buttercup (Crowfoot)</i>
aquatis	White Water-Crowfoot	Watercrowfoot Buttercup
eschscholtzii	Eschscholtz Buttercup	-----
gelidus	Gray Buttercup	-----
gmelini	-----	-----
hyperboreus	Arctic Buttercup	-----

SCIENTIFIC NAMES

COMMON NAMES

	<i>Anderson</i>	<i>Standardized</i>
ROSACEAE	ROSE FAMILY (CONT.)	
<i>Potentilla</i>	-----	<i>Cinquefoil</i>
biflora	Two-flowered Cinquefoil	-----
emarginata	Arctic Cinquefoil	-----
fruticosa	Shrubby Cinquefoil; Yellow Rose	Bush Cinquefoil
monspeliensis	Rough Cinquefoil	Montpelier Cinquefoil
nivea	Snow Cinquefoil	-----
tomentosa	-----	-----
palustris	Purple or Marsh Cinquefoil	Marsh Cinquefoil
uniflora	One-flowered Cinquefoil	Singleflowered Cinquef.
villosa	Villous Cinquefoil	Hairy Cinquefoil
<i>Rosa</i>	-----	<i>Rose</i>
acicularis	Prickly Rose	Prickly Rose
<i>Rubus</i>	-----	<i>Blackberry Dewberry; Raspberry</i>
acaulis	Nagoon Berry, Kneshenaka	-----
arcticus x stellatus		
chamaemorus	Cloudberry, Baked Apple Berry	Cloudberry
strigosus	American Red Raspberry	Red Raspberry
<i>Sanguisorba</i>	-----	<i>Burnet</i>
officinalis	Officinal Great Burnet	Garden Burnet
sitchensis	Sitka Great Burnet	Sitka Burnet
<i>Sibbaldia</i>	-----	<i>Common Name not listed</i>
procumbens	Sibbaldia	-----
<i>Spiraea</i>	-----	<i>Spirea</i>
beauverdiana or		
steveni	Beauverd Spiraea	-----
LEGUMINOSEAE OR FABACEAE	LEGUME OR PEA FAMILY	
<i>Astragalus</i>	-----	<i>Loco; Milkvetch; Poison- vetch</i>
alpinus	Alpine Milk Vetch	Alpine Milkvetch
alaskanus	-----	-----
arcticus	-----	-----
amblyodon	-----	-----
eucosmus	Pretty Milk Vetch	-----
macounii	Macoun Milk Vetch	-----
nutzotinensis	Sicklepod Milk Vetch	-----
polaris	Polar Milk Vetch	-----
umbellatus	Hairy Arctic Milk Vetch	-----
<i>Hedysarum</i>	-----	<i>Sweetvetch</i>
alpinus		

SCIENTIFIC NAMES

COMMON NAMES

Anderson

Standardized

LEGUMINOSEAE OR FABACEAE

LEGUME OR PEA FAMILY (CONT.)

<i>americanum</i> (var. <i>grandiflorus</i>)	American Hedysarum	-----
<i>mackenzii</i>	Wild Sweet Pea	-----
<i>Lupinus</i>	-----	<i>Lupine</i>
<i>arcticus</i>	Arctic Lupine	-----
<i>nootkensis</i>	Nootka Lupine	Nootka Lupine
<i>polyphyllus</i>	Large-leaved Lupine	Washington Lupine
<i>Oxytropis</i>	-----	<i>Crazyweed</i>
<i>foliolosa</i>	Foliose Oxytrope	-----
<i>gracilis</i>	Northern Yellow Oxytrope	-----
<i>leucantha</i>	-----	-----
<i>maydelliana</i>	Maydell Oxytrope	-----
<i>nigrescens</i>	Blackish Oxytrope	-----
<i>bryophila</i>	-----	-----
<i>pygmaea</i>	-----	-----
<i>viscida</i>	Vicid Oxytrope	-----
<i>viscidula</i>	-----	Yellowhair Crazyweed
<i>Trifolium</i>	-----	<i>Clover</i>
<i>hybridum</i>	Alsike Clover	Alsike Clover

GERANIACEAE

GERANIUM FAMILY

<i>Geranium</i>	-----	<i>Geranium (Crowfoot)</i>
<i>erianthum</i>	Northern Geranium	-----

CALLITRICHACEAE

WATER STARWORT FAMILY

<i>Callitriche</i>	-----	<i>Waterstarwort</i>
<i>verna</i>	Vernal Water-Starwort	-----

EMPETRACEAE

CROWBERRY FAMILY

<i>Empetrum</i>	-----	<i>Crowberry</i>
<i>nigrum</i>	Crowberry	Black Browberry

VIOLACEAE

VIOLET FAMILY

<i>Viola</i>	-----	<i>Violet</i>
<i>biflora</i>	Two-flowered Violet	Twinflower Violet
<i>langsdorfii</i>	Alaska Violet	Aleutian Violet
<i>renifolia</i> (var. <i>brainerdii</i>)	Kidney-leaved White Violet	Kidneyleaf Violet

ELAEOAGNACEAE

OLEASTER FAMILY

<i>Elaeagnus</i>	-----	<i>Elaeagnus</i>
<i>commutata</i>	Silverberry	Silverberry

SCIENTIFIC NAMES		COMMON NAMES
	<i>Anderson</i>	<i>Standardized</i>
SAXIFRAGACEAE	SAXIFRAGE FAMILY (CONT.)	
<i>Parnassia</i>	-----	<i>Parnassia</i>
kotzebuei	Kotzebue Grass-of-Parnassus	-----
palustris	Northern Grass-of-Parnassus	Wideworld Parnassia
<i>Saxifraga</i>	-----	<i>Saxifraga</i>
apicata	-----	-----
bronchialis	Spotted Saxifrage	-----
caespitosa	Tufted Saxifrage	-----
davurica	-----	-----
grandipetala	-----	-----
eschschoitzii	Ciliate Saxifrage	-----
flagellaris	Flagellate Saxifrage	-----
hieracifolia	Hawkweed-leaved Saxifrage	-----
hirculus	Yellow Marsh Saxifrage	-----
lyalli	Red-stemmed Saxifrage	Lyall Saxifrage
oppositifolia	Purple Mountain Saxifrage	Twinleaf Saxifrage
punctata	Brook Saxifrage	Dotted Saxifrage
nelsoniana	-----	-----
reflexa	Yukon Saxifrage	-----
rivularis	Alpine Brook Saxifrage	-----
serpyllifolia	Thyme-leaved Saxifrage	-----
tricuspidata	Three-toothed Saxifrage	Threebristle Saxifrage
<i>Boykinia</i> or <i>Therefon</i>	-----	<i>Boykinia</i>
richardsonii	Richardson Saxifrage	-----
GROSSULARIACEAE	GOOSEBERRY FAMILY	
<i>Ribes</i>	-----	<i>Currant; Gooseberry</i>
hudsonianum	Northern Black Current	Hudson Bay Currant
prostratum or		
glandulosum	Fetid Current	Skunk Currant
triste	American Red Current	American Red Currant
ROSACEAE	ROSE FAMILY	
<i>Drvas</i>	-----	<i>Dryad</i>
drummondii	Drummond Mountain Avens	Drummond Dryad
integrifolia	Entire-leaved Mountain Avens	-----
octopetala	Eight-petaled Mountain Avens	Mt. Washington Dryad
hookeriana	-----	-----
punctata	-----	-----
(var. <i>glabrata</i>)	-----	-----
<i>Geum</i>	-----	<i>Avens</i>
macrophyllum	Large-leaved Avens	Largeleaf Avens
rosii	Ross Avens	-----

SCIENTIFIC NAMES		COMMON NAMES
	<i>Anderson</i>	<i>Standardized</i>
BRASSICACEAE OR CRUCIFERAE	MUSTARD FAMILY (CONT.)	
<i>cinera</i>	-----	-----
<i>densifolia</i>	-----	-----
<i>hirta</i> or <i>glabella</i>	-----	Hairy Draba
<i>lanceolata</i>	-----	Lanceolate Draba
<i>longipes</i>	-----	-----
<i>nivalis</i>	-----	Snow Draba
<i>stenoloba</i>	-----	-----
<i>Ermania</i>	-----	<i>Genus not listed</i>
<i>borealis</i>	-----	-----
<i>parryoides</i>	-----	-----
<i>Erysimum</i>	-----	<i>Erysimum</i>
<i>inconspicuum</i>	Small-flowered Prairie Rocket	Smallflowered Erysimum
<i>pallasii</i>	Pallas Wallflower	-----
<i>Eutrema</i>	-----	<i>Genus not listed</i>
<i>edwardsii</i>	-----	-----
<i>lesquerella</i>	-----	<i>Bladdeprod</i>
<i>arctica</i>	Arctic Bladder-pod	-----
<i>Parrya</i>	-----	<i>Parrya</i>
<i>nudicaulis</i>	-----	-----
(var. <i>grandiflora</i>)	-----	-----
<i>Rorippa</i>	-----	<i>Marshcress</i>
<i>hispida</i>	-----	-----
<i>barbareaefolia</i>	Round-podded Yellow-cress	-----
<i>palustris</i>	Marsh Yellow-cress	Bog Marshcress
<i>Sisymbrium</i>	-----	<i>Garlicumustard</i>
<i>altissimum</i>	Tumble Mustard	Tumblemustard
<i>Subularia</i>	-----	<i>Awlwort</i>
<i>aquatica</i>	Awlwort	Water Awlwort
<i>Thlaspi</i>	-----	<i>Pennycress</i>
<i>arvense</i>	Field Penny Cress	Field Pennycress
CRASSULACEAE	STONECROP FAMILY	
<i>Sedum</i> or <i>Rhodiola</i>	-----	<i>Stonecrop</i>
<i>roseum</i>	Roseroot; Rosewort	Roseroot Sedum
<i>integrifolium</i>	-----	-----
SAXIFRAGACEAE	SAXIFRAGE FAMILY	
<i>Chrysosplenium</i>	-----	<i>Goldsaxifrage</i>
<i>alternifolium</i> or	-----	-----
<i>wrightii</i>	Bering Sea Water Carpet	Alternateleaf Goldsax
<i>tetrandrum</i>	Northern Water Carpet	-----

SCIENTIFIC NAMES	COMMON NAMES	
	<i>Anderson</i>	<i>Standardized</i>
RANUNCULACEAE	CROWFOOT FAMILY (CONT.)	
<i>lapponicus</i>	Lapland Buttercup	<i>Lapp Buttercup</i>
<i>multifidus</i>	-----	-----
<i>nivalis</i>	Snow Buttercup	-----
<i>pygmaeus</i>	Pygmy Buttercup	-----
<i>reptans</i> or <i>flammula</i>	Creeping Spearwort	Creeping Spearwort Buttercup
<i>sceleratus</i>	Celery-leaved Crowfoot	Blister Buttercup
<i>sulphureus</i>	Sulphur-colored Buttercup	-----
<i>Thalictrum</i>	-----	<i>Meadowrue</i>
<i>alpinum</i>	Arctic Meadow-rue	Alpine Meadowrue
<i>sparsiflorum</i>	Few-flowered Meadow-rue	-----
PAPAVARACEAE	POPPY FAMILY	
<i>Papaver</i>	-----	<i>Poppy</i>
<i>macounii</i>	Macoun Poppy	Macoun Poppy
<i>radicatum</i> or <i>als-</i> <i>kanum</i>	Arctic Poppy	-----
FUMARIACEAE	FUMEWORT FAMILY	
<i>Corydalis</i>	-----	<i>Corydalis</i>
<i>aurea</i>	Golden Corydalis	Golden Corydalis
<i>pauciflora</i>	Few-flowered Corydalis	-----
<i>sempervirens</i>	Pink Corydalis	Pale Corydalis
BRASSICACEAE OR CRUCIFERAE	MUSTARD FAMILY	
<i>Arabis</i>	-----	<i>Rockcress</i>
<i>divaricarpa</i>	Spreading-pod Rock Cress	-----
<i>lyrata</i>	-----	-----
<i>kamchatica</i>	Kamchatka Rock Cress	-----
<i>Barbarea</i>	-----	<i>Wintercress</i>
<i>orthoceras</i>	Winter Cress; Yellow Rocket	Erectpod Wintercress
<i>Capsella</i>	-----	<i>Shepherdspurse</i>
<i>bursa-pastoris</i>	Shepherd's Purse	Shepherdspurse
<i>Cardamine</i>	-----	<i>Bittercress</i>
<i>bellidifolia</i>	Alpine Cress	-----
<i>pratensis</i>	Cuckoo Flower	Cuckoo Bittercress
<i>purpurea</i>	Purplish Bitter-cress	-----
<i>umbellata</i>	Umbel-flowered Bitter-cress	-----
<i>Descurainia</i>	-----	<i>Tansymustard</i>
<i>sophioides</i>	Northern Tansy Mustard	-----
<i>Draba</i>	-----	<i>Draba (Whitlowort)</i>
<i>alpina</i>	-----	Rockcress Draba
<i>aurea</i>	-----	Golden Draba

SCIENTIFIC NAMES		COMMON NAMES
	<i>Anderson</i>	<i>Standardized</i>
CAMPANULACEAE	BELLFLOWER OR HAREBELL FAMILY (CONT.)	
<i>lasiocarpa</i>	Mountain Harebell	Behring Bellflower
<i>uniflora</i>	Arctic Harebell	Marsh Bellflower
OROBANCHACEAE	BROOM-RAPE FAMILY	
<i>Boschiniakia</i>	-----	<i>Genus not listed</i>
<i>rosica</i>	Poque	
PINGUICULACEAE OR LENTIBULARIACEAE	BLADDER-WORT FAMILY	
<i>Pinguicula</i>	-----	<i>Butterwort</i>
<i>villosa</i>	Hairy Butterwort	-----
<i>vulgaris</i>	Bog Violet; Common Butterwort	Common Butterwort
COMPOSITAE	CHICORY AND ASTER FAMILIES	
<i>Achillea</i>	-----	<i>Yarrow</i>
<i>borealis</i>	Northern Yarrow	-----
<i>lanulosa</i>	-----	Western Yarrow
<i>sibirica</i> or multi- flora	Siberian Yarrow	Siberian Yarrow
<i>Antennaria</i>	-----	<i>Pussytoes</i>
<i>alaskana</i>	-----	-----
<i>isolepis</i>	-----	-----
<i>monocephala</i>	-----	-----
<i>pallida</i>	-----	-----
<i>philonipha</i>	-----	-----
<i>pulcherrima</i>	-----	-----
<i>Arnica</i>	-----	<i>Arnica</i>
<i>alpina</i>	-----	Alpine Arnica
<i>attenuata</i>	-----	-----
<i>lessingii</i>	-----	-----
<i>louiseana</i>	-----	-----
<i>frigida</i>	-----	-----
(var. <i>pilosa</i>)	-----	-----
<i>Artemisia</i>	-----	<i>Sagebrush; Wormwood</i>
<i>alaskana</i>	-----	-----
<i>arctica</i>	Arctic Wormwood	-----
<i>borealis</i>	Northern Wormwood	Northern Wormwood
(var. <i>purshii</i>)	-----	-----
<i>frigida</i>	Prairie Sagewort	Fringed Sagewort
<i>globularia</i>	-----	-----
<i>tillesii</i>	-----	-----
<i>elatior</i>	-----	-----
<i>unalaskensis</i>	-----	-----

SCIENTIFIC NAMES		COMMON NAMES
	<i>Anderson</i>	<i>Standardized</i>
ELAEAGNACEAE	OLEASTER FAMILY (CONT.)	
<i>Shepherdia</i> canadensis	----- Soapberry, Soopolallie	<i>Buffaloberry</i> Russet Buffaloberry
ONAGRACEAE	EVENING PRIMROSE FAMILY	
<i>Epilobium</i> anagallidifolium angustifolium divuricum latifolium palustre	----- Pimpernel Willow-herb Fireweed Davurian Willow-herb Dwarf Fireweed, Riverweed Swamp Willow-herb	<i>Willowweed</i> ----- Fireweed ----- Red Willowweed -----
HALORAGIDACEAE	WATER-MILFOIL FAMILY	
<i>Hippuris</i> vulgaris <i>Myriophyllum</i> spicatum exalbescent	----- Common Mare's-tail ----- Spiked Water-Milfoil -----	<i>Marestail</i> Marestail <i>Parrotfeather</i> ----- -----
UMBELLIFEREAE OR AMMIACEAE	CARROT FAMILY	
<i>Angelica</i> or <i>Coelopleurum</i> lucida or gmelini <i>Bupleurum</i> americanum <i>Conioselinum</i> cnidifolium <i>Heracleum</i> lanatum <i>Ligusticum</i> mutellinoides	----- Sea Coast Angelica ----- American Thorough-wort ----- Dawson Hemlock-Parsley ----- Cow Parsnip ----- -----	<i>Common Name not listed</i> ----- <i>Thorowax</i> ----- <i>Hemlockparsley</i> ----- <i>Cowparsnip</i> Common Cowparsnip <i>Ligusticum</i> -----
CORNACEAE	DOGWOOD FAMILY	
<i>Cornus</i> canadensis canadensis x suecica	----- Bunchberry -----	<i>Dogwood</i> Bunchberry Dogwood -----
PYROLACEAE	WINTERGREEN FAMILY	
<i>Moneses</i> or <i>Pyrola</i> uniflora <i>Pyrola</i> asarifolia chlorantha	----- Single Delight; Wax Flower ----- Liver-leaf Wintergreen Greenish-flowered Wintergr.	<i>Woodnymph</i> Woodnymph <i>Pyrola</i> Alpine Pyrola Green Pyrola

SCIENTIFIC NAMES		COMMON NAMES
	<i>Anderson</i>	<i>Standardized</i>
PYROLACEAE		WINTERGREEN FAMILY (CONT.)
<i>grandiflora</i>	Large-flowered Wintergreen	-----
<i>minor</i>	Lesser Wintergreen	Snowline Pyrola
<i>secunda</i>	One-sided Wintergreen	Sidebells Pyrola
ERICACEAE		HEATH FAMILY
<i>Andromeda</i>	-----	<i>Andromeda</i>
<i>polifolia</i>	Bog Rosemary	Bogrosemary Andromeda
<i>Arctostaphylos</i>	-----	<i>Manzanita</i>
<i>alpina</i>	Alpine Bearberry	Alpine Ptarmiganberry
(var. <i>rubra</i>)	-----	-----
<i>uva-ursi</i>	Bearberry; Kinnikinnick	Bearberry; (Kinnikinnick)
<i>Arctous</i> or <i>Arcto-</i>		
<i>staphylos</i>	-----	<i>Ptarmiganberry</i>
<i>alpina</i>	Alpine Bearberry	Alpine Ptarmiganberry
<i>Cassiope</i>	-----	<i>Cassiope</i>
<i>mertensiana</i>	Mertens Mountain Heather	Mertens Cassiope
<i>tetragona</i>	Four-angled Mountain Heather	Firemoss Cassiope
<i>Chamaedaphne</i>	-----	<i>Leatherleaf</i>
<i>calyculata</i>	Leather-leaf	Leatherleaf
<i>Ledum</i>	-----	<i>Ledum</i>
<i>groenlandicum</i>	Labrador Tea	Labradortea Ledum
<i>palustre</i>		
<i>decumbens</i>	Narrow-leaved Labrador Tea	Sprawling Crystaltea L.
<i>Loiseleuria</i>	-----	<i>Alpineazalea</i>
<i>procumbens</i>	Alpine or Trailing Azalea	Alpineazalea
<i>Phyllodoce</i>	-----	<i>Mountainheath</i>
<i>empetriformis</i>	Red or Purple Heather	Red Mountainheath
<i>Rhododendron</i>	-----	<i>Rhododendron</i>
<i>lapponicum</i>	Lapland Rose Bay	Lapland Rhododendron
VACCINIACEAE		BLUEBERRY FAMILY
<i>Oxycoccus</i>	-----	<i>Cranberry</i>
<i>microcarpus</i>	Swamp Cranberry	-----
<i>Vaccinium</i>	-----	<i>Blueberry</i>
<i>uliginosum</i>	Bog Blueberry	Bog Bilberry
<i>vitis-idaea</i>	Mountain Cranberry; Lingen Berry	Cowberry
DIAPENSIACEAE		DIAPENSIA FAMILY
<i>Diapensia</i>	-----	<i>Diapensia</i>
<i>lapponica</i>	-----	Arctic Diapensia
<i>obovata</i>	Diapensia	-----

SCIENTIFIC NAMES		COMMON NAMES
	<i>Anderson</i>	<i>Standardized</i>
PRIMULACEAE	PRIMROSE FAMILY	
<i>Androsace</i>	-----	<i>Rockjasmine</i>
<i>chamaejasme</i>	-----	<i>Dwarf Rockjasmine</i>
<i>lehmanniana</i>	-----	-----
<i>Dodecatheon</i>	-----	<i>Shootingstar</i>
<i>frigidum</i>	-----	-----
<i>Douglasia</i>	-----	<i>Douglasia</i>
<i>gormanni</i>	-----	-----
<i>Primula</i>	-----	<i>Primrose</i>
<i>egalikensis</i>	Greenland Primrose	-----
<i>tschuktschorum</i>	Chukch Primrose	-----
<i>Trientalis</i>	-----	<i>Starflower</i>
<i>europaea</i>	Star Flower	European Starflower
<i>arctica</i>	-----	-----
GENTIANACEAE	GENTIAN FAMILY	
<i>Gentiana</i>	-----	<i>Gentian</i>
<i>acuta</i>	Northern Gentian	Northern Gentian
<i>algida</i>	Whitish Gentian	-----
<i>glauca</i>	Glaucous Gentian	Bluegreen Gentian
<i>propinqua</i>	Four-parted Gentian	-----
<i>prostrata</i>	Moss Gentian	-----
<i>Lomatogium</i> or	-----	-----
<i>Pleurogyna</i>	-----	<i>Felwort</i>
<i>rotatum</i>	Marsh Felwort	Marsh Felwort
POLEMONIACEAE	PHLOX FAMILY	
<i>Polemonium</i>	-----	<i>Polemonium</i>
<i>acutiflorum</i>	-----	-----
<i>boreale</i>	-----	Arctic Polemonium
<i>pulcherrimum</i>	-----	Skunkleaf Polemonium
BORAGINACEAE	BORAGE FAMILY	
<i>Eritrichium</i>	-----	<i>Common Name not listed</i>
<i>aretioides</i>	-----	-----
<i>Mertensia</i>	(Sharples - "Chiming Bells")	<i>Bluebells</i>
<i>paniculata</i>	Tall Lungwort	Panicle Bluebells
(Var. <i>alaskana</i>)	-----	-----
<i>Myosotis</i>	-----	<i>Forgetmenot</i>
<i>alpestris</i>	Forget-me-not	Alpine Forgetmenot
<i>arvensis</i>	Forget-me-not	Field Forgetmenot
SCROPHULARIACEAE	FIGWORT FAMILY	
<i>Castilleja</i>	(Sharples - "Indian Paint-brush")	<i>Paintedcup</i>

SCIENTIFIC NAMES		COMMON NAMES
	<i>Anderson</i>	<i>Standardized</i>
SCROPHULARIACEAE	FIGWORT FAMILY (CONT.)	
<i>Euphrasia</i>	-----	<i>Eyebright</i>
<i>subarctica</i>	-----	-----
<i>Lagotis</i>	-----	<i>Common Name not listed</i>
<i>glauca</i>	-----	-----
(var. <i>stelleri</i>)	-----	-----
<i>Pedicularis</i>	-----	<i>Pedicularis; (Lousewort)</i>
<i>capitata</i>	-----	-----
<i>labradorica</i>	-----	Labrador Pedicularis
<i>lanata</i>	-----	-----
<i>langsдорffii</i>	-----	Langsdorff Pedicularis
<i>oederi</i>	-----	-----
<i>sudetica</i>	-----	Sudetic Pedicularis
(var. <i>interior</i>)	-----	-----
<i>verticillata</i>	-----	Whorled Pedicularis
<i>Syntheris</i>	-----	<i>Kittentails</i>
<i>borealis</i>	Kitten tails	-----
<i>Veronica</i>	-----	<i>Speedwell</i>
<i>wormskioldii</i>	Alpine Speedwell	-----
RUBIACEAE	MADDER FAMILY	
<i>Galium</i>	-----	<i>Bedstraw</i>
<i>boreale</i>	Northern Bedstraw	Northern Bedstraw
<i>trifidum</i>	Small Bedstraw	Small Bedstraw
CAPRIFOLIACEAE	HONEYSUCKLE FAMILY	
<i>Linnaea</i>	-----	<i>Twinflower</i>
<i>borealis</i>	Twin-flower	-----
<i>americana</i>	-----	American Twinflower
<i>Viburnum</i>	-----	<i>Viburnum</i>
<i>edule</i> or <i>pauciflorum</i>	Few-flowered Highbush Cranberry	Mooseberry
DOXACEAE	MOSCHATEL FAMILY	
<i>Adoxa</i>	-----	<i>Muskroot</i>
<i>moschatelliana</i>	Musk Root	Muskroot
VALERIANACEAE	VALERIAN FAMILY	
<i>Valeriana</i>	-----	<i>Valerian</i>
<i>capitata</i>	Capitate Valerian	-----
<i>bracteosa</i>	-----	-----
CAMPANULACEAE	BELLFLOWER OR HAREBELL FAMILY	
<i>Campanula</i>	-----	<i>Bellflower</i>

SCIENTIFIC NAMES		COMMON NAMES
	<i>Anderson</i>	<i>Standardized</i>
COMPOSITAE	CHICORY AND ASTER FAMILIES (CONT.)	
<i>Aster</i>	-----	<i>Aster</i>
<i>sibiricus</i> or		
<i>richardsonii</i>	Siberian Aster	Siberian Aster
<i>Crepis</i>	-----	<i>Hawksbeard</i>
<i>elegans</i>	-----	-----
<i>nana</i>	-----	Tiny Hawksbeard
<i>Erigeron</i>	-----	<i>Fleabane</i>
<i>acris</i>	-----	Bitter Fleabane
(var. <i>asteroides</i>)		
(var. <i>elatus</i>)	-----	-----
<i>glabellus</i>	-----	Smooth Fleabane
<i>pubescens</i>	-----	-----
<i>grandiflorus</i>	-----	-----
<i>humilis</i> or		
<i>unalaskensis</i>	-----	-----
<i>purpuratus</i> or		
<i>denalii</i> (Nelson)	-----	-----
<i>Matricaria</i>	-----	<i>Mayweed</i>
<i>suaveolens</i> or		
<i>matricarioides</i>	Pineapple Weed	Pineappleweed
<i>Petasites</i>	-----	<i>Butterbur</i>
<i>frigidua</i>	Arctic Sweet Coltsfoot	-----
<i>frigidua</i> x		
<i>hyperboreus</i>	-----	-----
<i>Saussurea</i>	-----	<i>Saussurea</i>
<i>angustifolia</i>	-----	-----
<i>fiscida</i> or <i>vicida</i>	-----	-----
(var. <i>yukonensis</i>)		
<i>Senecio</i>	-----	<i>Groundsel</i>
<i>alaskanus</i>	-----	-----
<i>atropurpureus</i>		
<i>frigidus</i>	-----	-----
(var. <i>kjellmanii</i>)		
(var. <i>tomentosus</i>)		
<i>conterminus</i>	-----	-----
<i>fuscatus</i> or <i>denalii</i>		
<i>lugens</i>	-----	Senecio Intergerrimus
<i>pauperculus</i>	-----	Balsam Groundsel
<i>resedifolius</i>	-----	-----
<i>Solidago</i>	-----	<i>Goldenrod</i>
<i>multiradiata</i> or		
<i>corymbosa</i>	Northern Golden Rod	-----
<i>arctica</i>		

SCIENTIFIC NAMES		COMMON NAMES
	<i>Anderson</i>	<i>Standardized</i>
COMPOSITAE	CHICORY AND ASTER FAMILIES (CONT.)	
<i>Taraxacum</i>	-----	<i>Dandelion</i>
alaskanum	-----	-----
carneocoloratum	-----	-----
kamchaticum	-----	-----

SCIENTIFIC NAMES		COMMON NAMES
	<i>Anderson</i>	<i>Standardized</i>
LEGUMINOSEAE OR FABACEAE	LEGUME OR PEA FAMILY	
<i>Astragalus</i>	-----	<i>Loco; Milkvetch; Poison-vetch</i>
aboriginorum	Indian Milk Vetch	Indian Milkvetch
<i>Oxytropis</i>	-----	<i>Crazyweed</i>
scammaniana	Scamman Oxytrope	-----
VIOLACEAE	VIOLET FAMILY	
<i>Viola</i>	-----	<i>Violet</i>
epipsila		
repens	Northern Marsh Violet	-----
ONAGRACEAE	EVENING PRIMROSE FAMILY	
<i>Epilobium</i>	-----	<i>Willowweed</i>
hornemannii	Hornemann Willow - herb	Hornemann Willowweed
GENTIANACEAE	GENTIAN FAMILY	
<i>Swertia</i>	-----	<i>Swertia</i>
perennis	-----	Alpinebog Swertia
BORAGINACEAE	BORAGE FAMILY	
<i>Amsinckia</i>	-----	<i>Fiddleneck</i>
lycopsoides	Fiddle-neck	Tarweed Fiddleneck
<i>Eritrichium</i>	-----	<i>Common Name not listed</i>
spendens	Showy Eretrichium	-----
COMPOSITAE	CHICORY AND ASTER FAMILIES	
<i>Antennaria</i>	-----	<i>Pussytoes</i>
subcanescens	-----	-----

APPENDIX E

WILDERNESS CONSIDERATIONS AND AREAS OF ECOLOGICAL CONCERN

WILDERNESS CONSIDERATIONS

Upon initiation of studies under the Alaska Native Claims Settlement Act, the NPS informed the House and Senate Interior committee of its intent to delay wilderness studies for Mount McKinley National Park until final action by Congress in regard to the proposed additions.

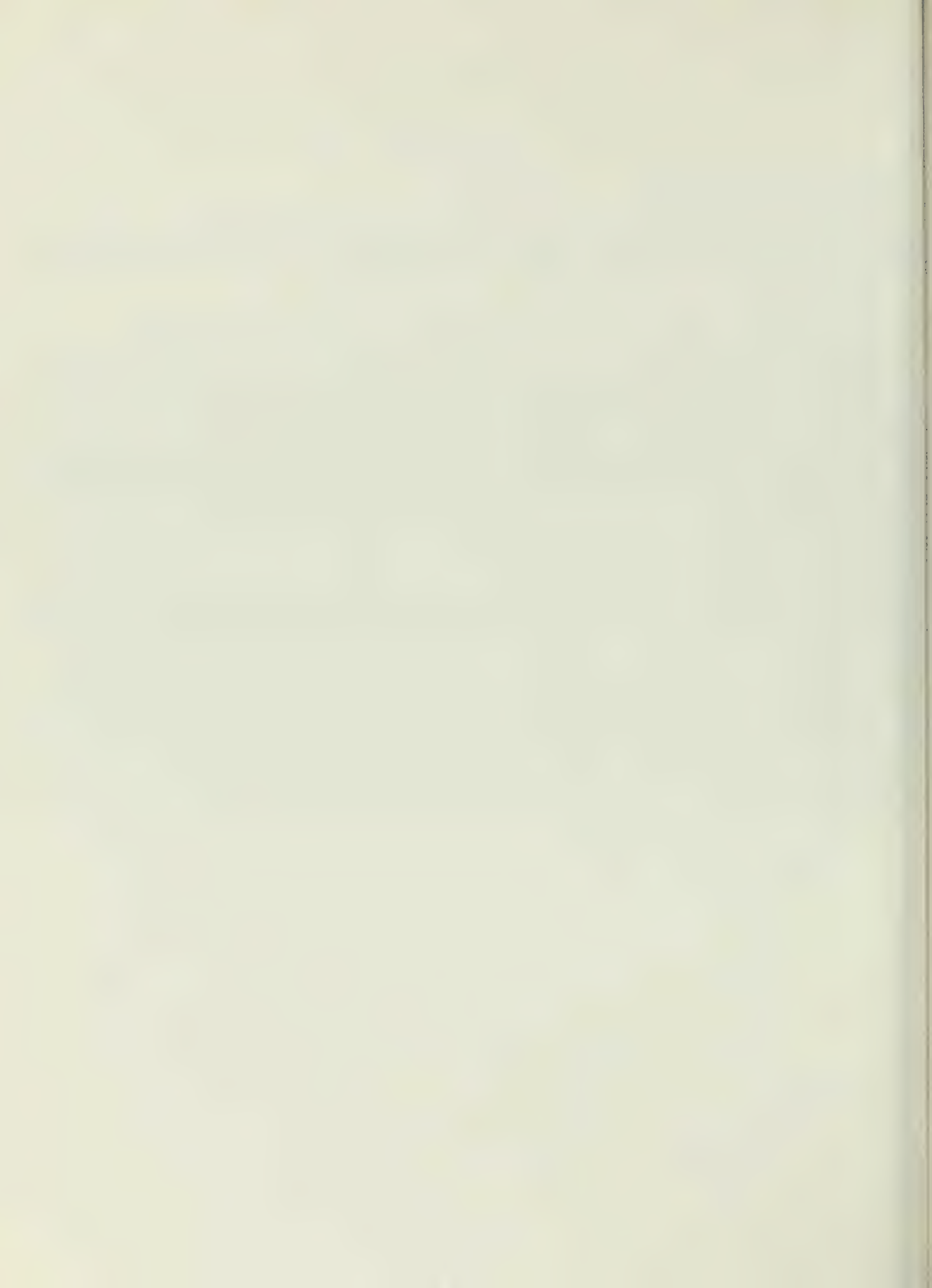
As regards wilderness in Alaska, the Department of the Interior has adopted the following policy:

Subject to final determination by the Congress, the landing of aircraft and use of motorboats will be permitted as means of access to designated Wilderness units subject to restrictions deemed necessary by the Secretary. Use of motorized, over-the-snow vehicles for subsistence purposes may be permitted within wilderness areas in Alaska. When such uses are recommended for continuation following wilderness designation, the levels of use and types of equipment utilized prior to the enactment date of ANCSA will be permitted to continue for subsistence purposes. Should such uses be shown as adversely affecting the plant and animal resources in a progressive and depleting manner, additional restrictions may be promulgated by the Secretary after consultation with representatives of subsistence uses.

AREAS OF ECOLOGICAL CONCERN

Areas of Ecological Concern are those lands and waters adjacent to but not proposed for inclusion in the system which contain resources that are part of the total ecosystem, and if compromised, would endanger resources within the proposal.

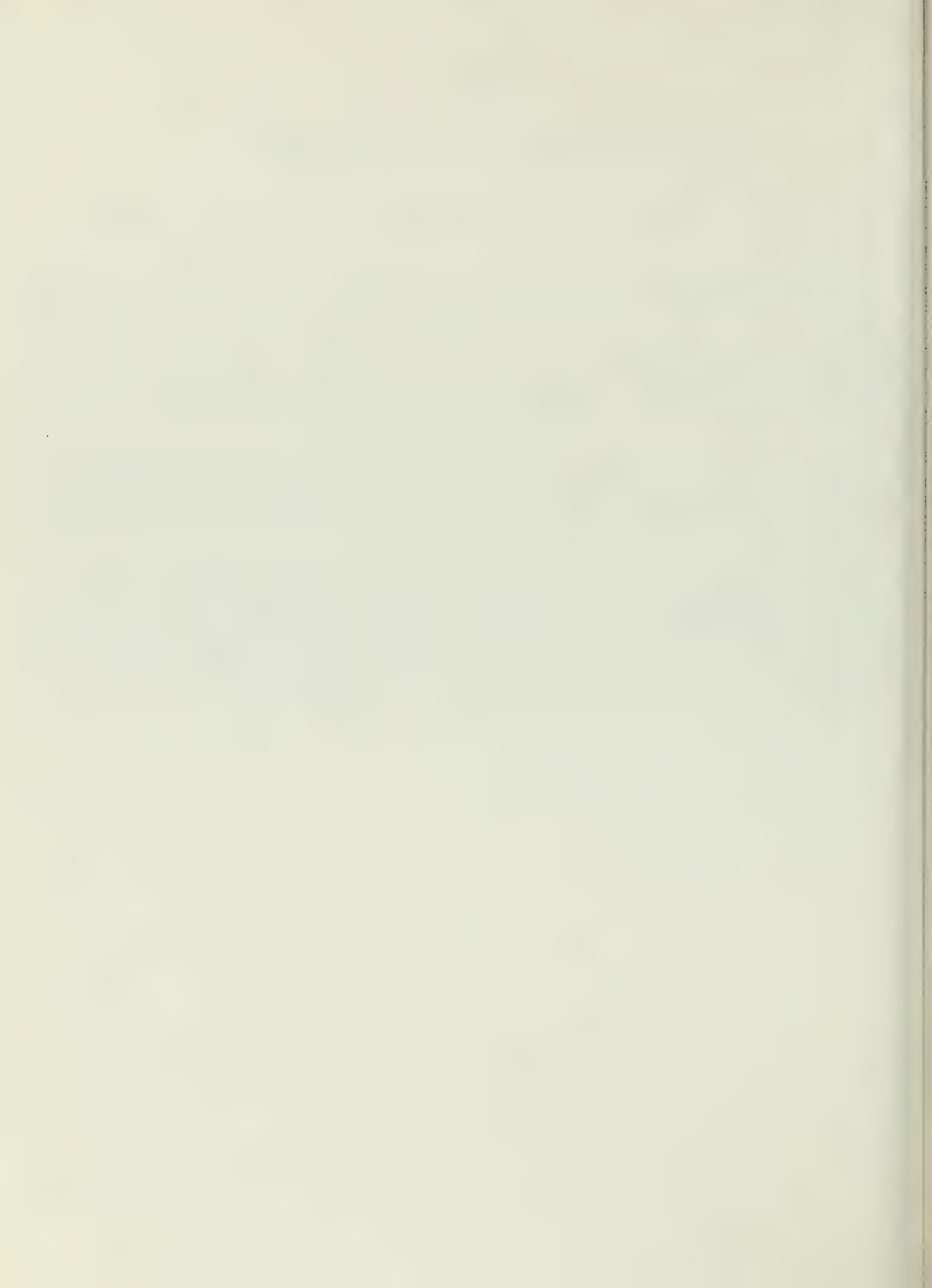
The Secretary may, if such lands and waters within the area of ecological concern are not selected to satisfy Native or State selection rights, submit a report to the Congress on his findings together with his recommendations as to whether such Federal lands should be added to the (park, monument, refuge, etc.). With respect to those lands within the area of ecological concern which are selected or are already in other ownership, the Secretary will request Congressional authorization to enter into cooperative agreements with the landowners to assure that those lands and waters are managed in a manner which will insure that the resource values are fully protected.



APPENDIX F

NOTES ON METHODOLOGY FOR PRELIMINARY FORECAST OF VISITS - MOUNT MCKINLEY NATIONAL PARK

- 1) The 1974 projection is based upon January through May 1974 recreation use at Mount McKinley.
- 2) An annual increase of 13.8% per year is projected through 1977. Due to aberrations in the historical data resulting from the modifications in reporting procedures in 1971 as well as the opening of the Anchorage-Fairbanks Highway in 1972, the historical trend was based upon the years 1964 through 1970. The average (compound) percentage increase for those years was 13.3% per year. Based upon the least squares straight line equation we calculated a second percentage increase of 13.8% which represents the middle year percentage change. Because the latter figure more nearly approximated the 14% annual increase in tourists entering Alaska for the previous eight years we chose this figure for projecting use. Projected use was rounded to the nearest thousands after calculating the percentage change. Consequently the figures may not equal a 13.8% increase when recalculated.
- 3) The percentage increase of 13.8% per year is expected to be maintained through 1977 (approximately five years following completion of the Anchorage-Fairbanks Highway). In 1978 we project a drop in the percentage increase in use at Mount McKinley which corresponds to the average percentage increase in use to all National Park Service areas (6.8% per year). For 1982 through 1988 a flat increase of 30 thousand per year is projected.
- 4) The forecast is labeled preliminary because it is not based directly on resident population or tourist entry projections. Data on non-resident use in particular of Mount McKinley as estimated in the 1971 Visitor Survey was found to be inconsistent with actual recreation use counts at Mount McKinley. An actual on-site survey of visitor origins is necessary in order to determine with any degree of accuracy the actual proportions of resident and non-resident users. Implicit in the preliminary forecast is continued increases in resident use. Without accurate updated data on our visitors we are unable to provide more scientifically reliable estimates of future use.



APPENDIX G

ESTIMATED ANNUAL SUBSISTENCE RESOURCE HARVESTS MOUNT MC KINLEY NATIONAL PARK AREA

RESOURCES HARVESTED	MC GRATH	MEDFRA	NIKOLAI	TELIDA
Resource	Number	Number	Number	Number
Black Bear	17	6	8	1
Brown Grizzly Bear	3	-	-	-
Beaver	100	150	100	51
Bison	1	-	-	-
Caribou	35	20	14	-
Coyote				
Fox (Arctic)				
Fox (Red, Cross)	10	15	5	1
Hare	200	125	150	25
Land Otter	10	20	15	7
Lynx	3	15	10	13
Marten	250	300	300	210
Mink	15	30	20	9
Moose	95	20	50	7
Muskrat	75	95	55	10
Porcupine	15	12	10	5
Sheep (Dall)	8	-	-	-
Squirrel (ground)	-	-	-	-
Squirrel (tree)	20	-	20	-
Weasel	15	23	1	1
Wolverine	8	6	8	3
Wolf	35	4	3	-
Totals, Pounds of Useable Weight	79,725	22,145	41,350	6,450
Crane	-	8	15	8
Swan				
Ducks	75	150	200	50
Geese	150	130	150	40
Ptarmigan	25	150	50	25
Spruce hen/grouse	135	160	200	20
Totals, Pounds	835	1,060	1,200	335
Blackfish	-	-	-	-
Cod (ling)	30	-	-	15
Grayling	200	60	-	100
Pike	60	50	150	110
Coho/Silver	60	150	-	-
Chum/Dog	200	200	200	-
King/Chinook	150	140	250	-
Humpey/Pink	-	10	200	-
Sockeye/Red	75	130	-	-
Sucker	25	95	50	8
Sheefish	175	85	280	150
Trout	-	15	-	-
Whitefish	250	300	400	500
Totals, Pounds	8,745	8,280	12,970	5,428

RESOURCES HARVESTED	MC GRATH	MEDFRA	NIKOLAI	TELIDA
Resource	Number	Number	Number	Number
<u>Berries</u>				
Blueberries	570	300	600	210
Blackberries	-	30	-	-
Cranberries	300	360	900	240
Crowberries				
Currants	-	-	-	-
Rasberries				
Salmonberries	60	150	300	180
Strawberries	2	240	-	-
Other (H.B. Cran)	360	-	-	-
Totals, Pounds	1,292	1,080	1,800	630
<u>Grasses/Roots/Wild Veg.</u>				
Totals, Pounds	179	110	370	120
<u>Garden Produce</u>				
Potatoes	5,000	2,000	500	-
Other	800	300	-	-
Totals, Pounds	5,800	2,300	500	-
<u>Forest/Vegetation</u>	Amount	Amount	Amount	Amount
Fuel (cords)	50	90	200	60
Construction (longs)	-	-	-	-
Other (Board feet)	5,000	5,000	20,000	2,150
Resource	Pounds	Pounds	Pounds	Pounds
<u>Recapitulation</u>				
Mammals	79,725	22,145	41,350	6,450
Wildfowl	835	1,060	1,200	335
Fish	8,745	8,280	12,970	5,428
Berries	1,292	1,080	1,800	630
Greens/Roots/Veg.	179	110	370	120
Garden Produce	5,800	2,300	500	-
Totals	96,576	34,975	58,190	12,963
Population, 1970	110	25	101	12
Native Enrollment, 1973	150	2	87	17
Per Capita 1970	878	1,399	576	1,080
Per Capita 1973	644		669	762

* Fur bearers not used for human consumption.

Source: The inventory data was obtained in 1973 by the Doyon regional representatives soliciting the information from committees in the listed villages of its Mc Grath subregion. Data compiled and presented by Art Patterson, Resources Planning Team, Joint Federal State Land Use Planning Commission, February 1974.

APPENDIX H



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

DEC 17 1973

Dear Mr. Speaker:

Transmitted herewith is a bill, "To provide for the addition of certain lands in the State of Alaska to the National Park, National Wildlife Refuge, National Forest, and the Wild and Scenic Rivers Systems, and for other purposes."

We recommend that this bill be referred to the appropriate Committee and that it be enacted.

On December 18, 1971, President Nixon signed into law the historic Alaska Native Claims Settlement Act (ANCSA) (PL 92-203). This legislation extinguished all aboriginal claims to land in Alaska and in return provided the Natives with a land settlement of 40 million acres and a monetary settlement of nearly a billion dollars.

In addition, section 17(d)(1) of the Act authorized the Secretary of the Interior (hereinafter referred to as the "Secretary") to withdraw such public domain lands as he thought advisable to ensure that the public interest in them is properly protected.

Section 17(d)(2) of the Act authorized the Secretary to withdraw up to 80 million acres of land to be studied for possible addition to the National Park, Forest, Wildlife Refuge, and Wild and Scenic Rivers Systems. Section 17(d)(2) also required all legislative proposals coming from such studies to be submitted to the Congress within two years, by December 18, 1973, and provided that Congress would have five years to act following receipt of the legislation. During this period lands in those proposals withdrawn under 17(d)(2) would not be subject to appropriation under the public land laws. The bill transmitted with this letter constitutes the legislative proposals pursuant to that authority.

The process of developing the proposals began in January of 1972 with the Bureau of Sport Fisheries and Wildlife and the National Park Service concentrating on the identification of their "areas of interest" in Alaska without regard to management jurisdiction.

During February 1972 these two agencies screened the "areas of interest" to identify the specific areas that warranted detailed on-the-ground study for possible addition to the National Wildlife Refuge and Park Systems. These particular areas were then reviewed within the Department to determine the lands to be withdrawn in March of 1972 under the 17(d)(1) and 17(d)(2) provisions of the Act. The March withdrawal also recognized certain river areas that warranted study for possible addition to the Wild and Scenic Rivers System. In addition, additional acreage from which the Natives were to select some of the land to which they were entitled was withdrawn.

During the summer of 1972 the National Park Service, Bureau of Outdoor Recreation, Bureau of Sport Fisheries and Wildlife and Forest Service conducted detailed studies of the withdrawn lands.

In August of 1972, the Joint Federal-State Land Use Planning Commission, a commission created by the ANCSA to advise the Federal and State governments, provided its recommendations for the final 17(d)(2) withdrawals to be made in September. On September 17 the final 17(d)(2) withdrawals of 79.3 million acres were made. The withdrawals reflected negotiations with certain of the Native Regional Corporations. Subsequent adjustments have also been made in native deficiency withdrawals, after consultation with the Natives.

During the remainder of 1972 and early 1973 the agencies refined their studies on the D-2 and the related D-1 lands.

During May and June of 1973 the Joint Federal-State Land Use Planning Commission held over 30 hearings in Alaska and four hearings in the Lower 48 States to obtain comments from the public concerning use potentials for the 17(d)(2) lands. The testimony from these hearings, as well as specific recommendations submitted by the Commission regarding 17(d)(2) withdrawals, were all considered in developing final recommendations.

The decisions on additions to the National Park, Refuge, Forest and Wild and Scenic Rivers Systems have not been easy to make. Alaska is a vast land with a great variety of resource values, many of which are of national and international importance. It contains great mineral, oil, and forest resources, a wide variety of ecosystems, outstanding archeological artifacts, and some of the most magnificent scenery in the world. It is the only place in the United States where Native people are living on the land on a subsistence basis.

In the proposed legislation, we have taken into account the special characteristics of Alaska and we have used several new approaches which we believe are particularly suited to Alaska. For example, we are proposing joint management of resources by two or more federal bureaus in several instances, because the resources of the areas seem to require this joint approach. The Chukchi-Imuruk National Reserve and the two southern units of the Harding Ice Field-Kenai Fjords National Monument, which have both park-quality resources and high fish and wildlife values, will be administered jointly by the National Park Service and Bureau of Sport Fisheries and Wildlife. Iliamna National Resource Range will be administered as a unit of the National Wildlife Refuge System and will also be administered to permit multiple-use activities compatible with the Bristol Bay fishery resource. The Noatak National Arctic Range will be jointly managed by the Bureau of Sport Fisheries and Wildlife and the Bureau of Land Management to provide for protection of the natural features of the area and for scientific research.

We intend to negotiate cooperative agreements where possible with the owners of adjacent lands including federal agencies, state and local governments, and private persons, including native corporations, as well as foreign nations, provided the Secretary of State concurs. The agreements would have as their purpose assuring that these adjacent areas will be managed, insofar as possible, in a manner consistent with preservation of the park system and refuge system units. The maps referred to in the proposed legislation show certain areas adjacent to park and refuge units designated as "areas of ecological concern"; we will make particular efforts to conclude cooperative agreements with respect to these areas. Government agencies licensing, funding, or carrying out undertakings on adjacent lands, unless they are parties to a cooperative agreement, would be required by our proposal to offer the Secretary a reasonable opportunity to comment on their undertakings.

We have also provided for subsistence use of fish, wildlife and plant resources in recognition of the established subsistence hunting practices in Alaska, on both national park and refuge system areas. The need for a subsistence use provision is unique to Alaska, where members of the Native population are living on a subsistence basis.

We recognize in submitting these proposals to the Congress that further information is needed before decisions can be reached on some issues. As Alaska continues to develop, there will be a need for rights of way and corridors to adequately accommodate transportation and utility requirements. However, the information on these needs is not fully developed at this time and therefore decisions cannot be made before the December 18, 1973 deadline for submitting 17(d)(2) legislative proposals to Congress. We plan to work with the Congress and the State of Alaska in determining what these needs are and how they can be met. We plan to keep our proposals and their resources under continuing study to determine if any subsequent changes in boundaries or uses are necessary. If such changes are determined to be necessary, they will be referred to the Congress for appropriate action.

The following pages deal with specific proposals in detail. The legislation has been divided into four titles: 1) National Park System, 2) National Wildlife Refuge System, 3) National Forest System, and 4) Wild and Scenic Rivers System additions which are not located in any of the above three systems. Wild and Scenic Rivers System proposals are also found in the first three titles, in cases in which the river runs through a national park, refuge, or forest system area.

We are proposing to add acreage to two existing national park system areas, and to create nine new park areas, as follows:

1. Mt. McKinley National Park (additions)	3.18 million acres
2. Katmai National Park (additions)	1.87
3. Aniakchak Caldera National Monument	.44
4. Harding Ice Field-Kenai Fjords National Monument	.30
5. Cape Krusenstern National Monument	.35
6. Kobuk Valley National Monument	1.85
7. Lake Clark National Park	2.61
8. Wrangell-St. Elias National Park	8.64
9. Gates of the Arctic National Park	8.36
10. Yukon-Charley National Rivers	1.97
11. Chukchi-Imuruk National Reserve	<u>2.69</u>
	32.26 subtotal

We are proposing nine new additions to the National Wildlife Refuge System:

1. Alaska Coastal National Wildlife Refuges	.07 million acres
2. Arctic National Wildlife Refuge	3.76
3. Iliamna National Resource Range	2.85
4. Koyukuk National Wildlife Refuge	4.43
5. Noatak National Arctic Range	7.59
6. Selawik National Wildlife Refuge	1.40
7. Togiak National Wildlife Refuge	2.74
8. Yukon Delta National Wildlife Refuge	5.16
9. Yukon Flats National Refuge	<u>3.59</u>
	31.59 subtotal

We are proposing establishment of three new national forest system areas, and additions to a fourth existing area:

1. Porcupine National Forest	5.50 million acres
2. Wrangell Mountains National Forest	5.50
3. Yukon-Kuskokwim National Forest	7.30
4. Chugach National Forest (additions)	<u>.50</u>
	18.80 subtotal

We are proposing six additions to the National Wild and Scenic Rivers System which are located entirely within park system areas, five located entirely within refuge system areas, one which flows through both a park and a refuge system area and four located entirely within forest system areas. In addition, we are proposing four components not located on park, refuge or forest system lands:

1. Beaver Creek	.20 million acres
2. Birch Creek	.20
3. Fortymile	.32
4. Unalakleet	<u>.10</u>
	.82

The total acreage added is 83.47 million acres.

National Park System

Administration

Title I of the proposed legislation would add additional acreage to two existing parks and monuments and create nine new units of the National Park System. Administration of these areas will be under the authority of Act of August 25, 1916 (39 Stat. 535 et seq.) as amended and supplemented (16 U.S.C. 1, et seq.). Chukchi-Imuruk National Reserve and the two southern units of the Harding Ice Field-Kenai Fjords National Monument will be managed jointly by the National Park Service and the Bureau of Sport Fisheries and Wildlife pursuant to a cooperative agreement. The other areas will be managed entirely by the National Park Service. Lands within the boundaries of the added and new areas may be acquired by purchase, donation, or exchange; except that lands owned by the State or political subdivisions of the State may be acquired only by donation or exchange, and property owned by a native village or corporation may be acquired only with the concurrence of the owner. Minor boundary changes may be made, after notice requirements are met, including notice to the Interior and Insular Affairs Committees. Administrative sites located outside the park system area boundaries may be added to the areas and included within the boundaries after notice requirements are met, but the sites may not exceed 80 acres for any one park system area.

Mining and Mineral Leasing

The federal lands within the boundaries of the areas added to existing units or established by the title are withdrawn, subject to valid existing rights, from location, entry and patent under the public lands laws, including from all forms of appropriation under the United States mining laws, and from operation of the mineral leasing laws. This withdrawal also applies to areas presently within Mount McKinley National Park. Since lands within the existing Katmai National Monument are already withdrawn, no reference is made to them in the legislation. A one year limit is established during which all mining claims must be recorded; an application for patent must be made within three years of recordation, or the claim will be presumed invalid.

An exception to these withdrawals is made to allow mineral leasing in the Yukon River watershed of the Yukon-Charley National River, other than the Charley River; these lands are not withdrawn from operation of the mineral leasing laws and are specifically made subject to the Mineral Leasing Act of 1920, except that provision is made for administrative cancelling of leases and permits for violations of the terms of leases and permits or regulations. These lands are withdrawn from appropriation under the mining laws by subsection 106(a), but minerals of the types subject to the mining laws may be removed under a permit system provided for in subsection 106(b).

Sport Hunting

Sport hunting will be permitted in specified townships of Aniakchak Caldera National Monument and in Lake Clark National Park, Wrangell-St. Elias National Park, the Gates of the Arctic National Park, Chukchi-Imuruk National Reserve, and Yukon-Charley National Rivers, in accordance with regulations prescribed by the Secretary. Sport hunting may not take place, however, if prohibited by state or federal law. The Secretary may establish limits on numbers and types of species taken and manner of taking, and may prohibit taking; he may also designate zones where, and periods when, no sport hunting will be permitted for reasons of public safety, administration, fish and wildlife management, or public use or enjoyment. Regulations except in emergencies, are to be put into effect only after consultation with the appropriate fish and game agency of the State of Alaska.

The proposal requires a report to the Congress at specified intervals on the effect of all hunting, fishing and trapping, including subsistence uses, on the flora and fauna of the areas added to existing units or established by the title.

Subsistence Uses

Except as otherwise prohibited by state or federal law, subsistence uses of fish, wildlife and plant resources will continue within the areas added to existing park system units or established as new units, to the extent that such uses were in effect on the date of enactment of ANCSA, unless the Secretary finds that such uses would materially and negatively affect the fish, wildlife or plant resources of such areas. The Secretary may prescribe conditions under which subsistence uses shall be conducted, and may prohibit takings altogether. Regulations on subsistence uses are to be promulgated after consultation with the appropriate fish and game agency of the state.

Cooperative Agreements

The Secretary is specifically authorized to enter into cooperative agreements with federal agency heads and owners of land within, adjacent to, or related to the park system areas added to existing units or established by the title. The agreements may be made, for example, with federal agencies, state or local governments, native corporations, villages

or groups, and foreign governments, with the concurrence of the Secretary of State. The agreements would be drafted to ensure management of the areas subject to the agreement in a manner consistent with preservation of the park system areas. They could also provide for access by the park visitors to and across the lands. A provision similar to section 106 of the Historic Preservation Act of 1966 is included in the legislation, requiring agencies licensing, funding or carrying out projects or other undertakings in the areas within, related to or adjacent to park system areas to give the Secretary opportunity to comment on such undertakings; federal agencies which are parties to cooperative agreements with respect to the particular park system area are exempted from this requirement since such reporting requirements could be included in the agreement.

Wilderness Review

With respect to the areas added to existing units or established by the title, the Secretary has 3 years from the date of enactment to report his recommendations for wilderness designation, in accordance with subsections 3(c) and 3(d) of the Wilderness Act. The wilderness recommendation for the existing Mount McKinley National Park must also be made within 3 years, from date of enactment.

Wild and Scenic Rivers System Components

Seven river components -- Alatna, Aniakchak, Charley, Killik, Noatak, Salmon and Tinayguk -- are added to the wild and scenic rivers system by title I. Studies of these rivers have been completed which are the equivalent of the studies carried out on rivers designated under section 5(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1276(a)). We are therefore recommending addition of these rivers directly to the system, rather than inclusion on the 5(a) study list. All seven rivers are classified as wild rivers and are to be administered as wild rivers pursuant to the Wild and Scenic Rivers Act. The rivers are exempted from the requirements of 3(b) of establishing detailed boundaries, preparing development plans, and classifying as wild, scenic or recreational rivers. They are also exempted from the duplicative and potentially conflicting acquisition provisions of section 6 of the Act and fish and wildlife provisions of section 13(a) of the Act.

Specific Areas

Descriptions of specific areas and specific legislative provisions applying to these areas follow:

1. Mount McKinley National Park Additions. Mount McKinley National Park was established in 1917. This proposal will add approximately 3.18 million acres to the present park, which now includes about 2 million acres. About half of the additions are to the north of the existing park, and constitute critical wolf, sheep, moose and caribou range necessary to ensure the continued viability of the ecosystem of the Mount McKinley area. The area also has important waterfowl values. The remaining half of the added acreage is to the south of the park. It includes part of the Mount McKinley mountain massif not now within the park, spectacular glacial systems, and the intricately dissected, awesomely beautiful Cathedral Spires. Lowland areas in the southern portion will provide ecologic diversity for the park and opportunity for recreational use and access. The added areas will be managed as natural areas with the primary objectives of preserving the large mammal ecosystem and the scenic beauty of the area; development will be minimal, with emphasis on the recreation potential of the area in its natural condition. Headquarters will be relocated from its present site north of the Alaska Range to the south side of the range.

A cooperative planning and management zone, adjacent to the south and east boundaries of the expanded park, has been designated on the maps referred to in the legislation. This area encompasses the threshold lands to Mount McKinley. Within 3 years from the date of enactment of the title, the Secretary will be required to submit a report to the Congress on whether land-use controls needed for proper protection of the park have been instituted by the State and local governments with respect to this zone. Comments of the Governor and the Joint Federal-State Land Use Planning Commission will be solicited and submitted to Congress as well.

2. Katmai National Park. Katmai National Monument was established in 1918 by Presidential Proclamation, and subsequently enlarged to about 2.6 million acres. The legislation would add 1.37 million acres to the monument and redesignate it as a national park. The national monument, which is located on the upper Alaska Peninsula, was originally established to preserve a scenic region containing an area devastated in 1912 by volcanic eruption and ash deposition.

The proposed expanded park will include the headwaters of all watersheds draining through the present monument. Inclusion of the headwaters will help assure preservation of the sockeye(red) salmon spawning and nursery waters in these headwaters. The park would also include a protected area sufficiently large to include an unhunted, self-perpetuating population of the giant Alaskan brown bear. The southern portion of the park will include a representative portion of the Bristol Bay lowland tundra, the only representative of this landform type in the national park system. Katmai will continue to be managed as a natural category area with the primary objective of insuring maximum retention of land and wildlife in as near as possible to their natural state. Hunting, trapping, and commercial fishing will not be allowed.

3. Aniakchak Caldera National Monument. The proposed Aniakchak Caldera National Monument, which will include approximately 440,000 acres, lies on the Alaska Peninsula approximately 350 air miles south of Anchorage. The 30-square mile Aniakchak Caldera is one of the world's greatest dry volcanic caldera (craters), and contains many examples of volcanic activity, including lava flows, cinder cones, a lava plug, warm springs, explosion pits, and layers of volcanic and sedimentary rocks exposed by volcanic action. A rift running through the caldera has created portals in the caldera wall; the eastern portal is a spectacular 2,000-foot gash through which the Aniakchak River flows. Also included in the national monument are ash fields surrounding the caldera, tundra-covered lowlands, and portions of the Aleutian Mountain Range, and the Aniakchak River. The Aniakchak River is proposed by the legislation for designation as a component of the wild and scenic rivers system and classification as a wild river, pursuant to the Wild and Scenic Rivers Act.

The rivers and streams within the monument support abundant salmon, trout and many other fish. Brown bear and moose are found almost throughout the area. The coastal portion of the monument, including cliffs and off-shore islands, harbor sea lions, sea otters, seals, and sea birds.

4. Harding Ice Field-Kenai Fjords National Monument. The proposed Harding Ice Field-Kenai Fjords National Monument, consisting of about 300,000 acres, encompasses two major elements of the Alaska scene: a 700-square mile icecap, with outflowing glaciers, and a series of coastal fjords with abundant bird and marine life. It is located south of Anchorage, on the Kenai Peninsula, about 2 1/2 hours by car. The monument consists of three units and provision is made for including

a central area between the three units in the monument, as well, if all or part of this area is not selected by native corporations pursuant to the Alaska Native Claims Settlement Act. The two southern units of the monument will be administered jointly by the National Park Service and the Bureau of Sport Fisheries and Wildlife, pursuant to a cooperative agreement.

The high point of Harding Ice Field is 5,270 feet. Numerous glaciers flow outward from the icefield, some reaching the sea, others ending in large lakes, or on bare ground. Cirques, horns, morains, nunataks, and other glacial features can be seen. Of the 4 major icefields in the United States, Harding has the most expansive central area which is not broken by mountains and crevasses. The icecap-like appearance is awesome, providing the visitor a unique experience.

Glaciers from the icefield have cut deep fjords into the mountainous coast. Dense, rain forest-type vegetation cloaks the cliffs and mountains. Marine mammals and sea birds abound on these cliffs and in the fjords.

5. Cape Krusenstern National Monument. The proposed Cape Krusenstern National Monument, situated north of the Arctic Circle in northwestern Alaska, will protect an internationally significant series of archeological sites. The area proposed for the national monument, comprising approximately 350,000 acres, includes a level coastal plain dotted with sizable lagoons, which on the east meets an ancient sea cliff and low rolling hills. The area illustrates, in a horizontal stratigraphy of beach ridges that is unique in size and scope, every known cultural period in arctic Alaska; this succession of 114 gravel beaches extends from 1 1/2 to 3 miles inland. The area, which was ice-free in the late Pleistocene, may reveal information on the peopling of the Americas across the thousand-mile wide Bering Land Bridge. The land bridge is now partially under water.

The national monument, in addition to its archeological significance, will provide a representative segment of arctic coastal tundra, a type of ecosystem not now represented in the National Park System. The long term stability of the coast also makes the area significant for studies of sea level and coastal currents.

Management of the area will be to preserve evidence of prehistoric man and his environment for study by scientists and for other visitors. Developments will be minimal to preserve the overall scene and prevent damage to the fragile ecosystems.

6. Kobuk Valley National Monument. The proposed Kobuk Valley National Monument, comprising about 1,850,000 acres, is located above the Arctic Circle in the central Kobuk Valley in northwestern Alaska. It is bounded on the north by the crest of the Baird Mountains and on the south by the Waring Mountains. It includes the Kobuk River, with its myriad meander sloughs and oxbow lakes, the Great Kobuk Sand Dunes, covering more than 20 square miles that are the relics of a prehistoric dune area covering over 300 square miles, and the Salmon River. The Salmon River is proposed for inclusion in the wild and scenic rivers system, and classification as a wild river. The monument is representative of both the Western Interior Alaska and Brooks Range physiographic province, and includes the northwestern limits of boreal forest. The northern portion of the winter range of the Arctic caribou herd and several important migration routes lie within the proposal. Moose, black and grizzly bear, and wolves are indigenous.

Provision is made in the legislation for inclusion of those parts of the Onion Portage area that are not selected by native corporations pursuant to ANCSA as part of the monument; Onion Portage is one of the most important archeological sites in arctic North America, with over 30 cultural horizons.

The portion of the Kobuk Valley included in the monument has an appeal as a "friendly" place, which is rare for the arctic. Boating is safe and easy, and there is excellent hiking on the dunes and in the Waring Mountains. The Baird Mountains offer excellent mountaineering opportunities.

7. Lake Clark National Park. The proposed Lake Clark National Park, of approximately 2,610,000 acres, is located north of the existing Katmai National Monument on the Cook Inlet. It straddles the Alaska and Aleutian Mountain ranges, and includes a series of glacier-created lakes on the west. The National Park Service has been studying the area for possible addition to the park system since the late 1950's.

In the areas proposed for a national park, numerous valleys weave through a jumble of mountains. There is a maze of natural hiking routes, which permit surprisingly easy entrance to a spectacular mountain environment. The park encompasses still-smoking volcanoes, spectacular spires, and glaciers.

The park includes a portion of the Cook Inlet coastline, which ranges from gentle alluvial shapes in the north to deeply incised, spruce-covered coastal hills in the south.

Waterfowl, seabirds, trout, bear, moose, sheep and marine mammals can be found in the park. Plant communities range from coastal spruce and marsh to alpine meadows and lichen growth at high elevations.

We have had discussions with the Cook Inlet Regional Corporation regarding the possibility of exchanging at some future date land in the Kenai National Moose Range for land which they are entitled to select near the proposed Lake Clark National Park. Presently, the Bureau of Sport Fisheries and Wildlife and the Federal-State Commission are conducting studies of the Range to determine whether some of the land is no longer needed for the purposes of the Range.

Developments in the park will be located to maintain the ecological and scenic integrity of the area. The area will be managed as a natural area with the objective of preserving its scenic beauty, wilderness attributes, areas of scientific interest and plant and animal life.

8. Wrangell-St. Elias National Park. The proposed Wrangell-St. Elias National Park, including approximately 8,640,000 acres, is located in south-central Alaska, and stretches 160 miles north from the Gulf of Alaska. Much of the Wrangell-St. Elias and Chugach mountain ranges will be included in the park, including 18,000-foot Mount St. Elias 16,000-foot Mount Blackburn and the largest glacier system in the United States, including Malaspina and Bering glaciers and Bagley Ice Field. The park includes spectacular ice-sculptured valleys, rolling interior foothills, and a small sample of coastal plain. Abundant land and sea mammal and fish species include moose; wolf; wolverine; black, glacier and brown-grizzly bear; caribou; Dall sheep; sea lions; otters; seals; killerwhales; salmon; trout; and grayling. A number of historic sites from the early mining era in Alaska are located in the river valleys within and in the vicinity of the park.

The proposed legislation provides that the Secretary of Agriculture and the Secretary of the Interior shall consult in the development of management plans for the Wrangell Mountains National Forest and the adjoining Wrangell-St. Elias National Park to achieve the fullest possible coordination and cooperation.

The park would be managed to ensure maximum retention of the landscapes and lifeforms in a natural state.

9. Gates of the Arctic National Park. The proposed Gates of the Arctic National Park, comprising approximately 8,360,000 acres, is located in the central Brooks Range, 200 air miles northwest of Fairbanks, and a similar distance southeast of Barrow on the Arctic Ocean coast. The park will protect Alaska's most complete and varied array of arctic scenic and biologic resources. The area's scenic values derive from the gaunt grandeur of the tundra environment and the vast open valleys and sweeps of mountains.

Mount Igikpak, a spectacular turreted peak which is the highest in the central and western Brooks Range, (8,510 feet) is included in the western portion of the park, as are the Arrigetch Peaks, among America's most precipitous mountains, and Walker Lake, an exceptional geological and ecological area. Several other large lakes on the southern flank of the range are in the proposed park, as are two on the Arctic Slope. The eastern part of the park includes the striking mountain and valley formation called the Gates of the Arctic and other mountains and wilderness made famous in the writings of Bob Marshall. We are proposing four rivers within the park for inclusion in the wild and scenic rivers system, and classification as wild rivers -- the Alatna, the Killik, the Noatak, and the Tinayguk.

Wildlife includes migrants from the huge arctic caribou herd as well as grizzly bear, Dall sheep, moose, wolves, raptors, and arctic char, lake trout, northern pike and grayling.

Limited recreation development in keeping with the primitive character of the area appears to be appropriate for the central portion of the park. No developments except for those necessary for management purposes are planned for the eastern and western portions.

10. Yukon-Charley National Rivers. The proposed Yukon-Charley National Rivers, which comprises approximately 1,970,000 acres, is located in east-central Alaska, its eastern boundary the United States-Canadian border. It includes a part of the Yukon River, and the Charley River drainage in its entirety. The Charley River empties into the Yukon between the towns of Eagle and Circle, and this confluence is within the national rivers. The Yukon River area is rich in history. The town of Eagle, which is near the park boundary, has well-preserved buildings dating back to the gold-rush era, and there are a number of remains of buildings along the banks of the Yukon within the national rivers. There are also wildlife resources, including the highest known concentration of nesting peregrine falcons. Geologic features include an uninterrupted visible cross-section of rock strata dating from Upper Cambrian times (500 million years ago) to the present.

The Charley River basin is significant because of its undisturbed nature and its fine cross-section of interior Alaska flora and fauna. There is high potential for recreational boating on the Charley and for camping and hiking through the Charley River basin. The Charley River is recommended by the legislation for inclusion in the wild and scenic rivers system, and for classification as a wild river.

The proposed Yukon-Charley National Rivers will be managed as a recreation category area. Management will provide for protection of and use of recreational, historic and natural values. Along the Yukon River, mineral leasing under 1920 Mineral Leasing Act will be permitted, subject to certain special provisions and minerals normally subject to the mining laws may be removed pursuant to a permit system in the legislation.

11. Chukchi-Imuruk National Preserve. The proposed Chukchi-Imuruk National Reserve, comprising approximately 2,690,000 acres, is located on the Seward Peninsula in northwestern Alaska. The area is a relict of the much larger area which constituted the Bering Land Bridge. It is a superb representation of a great diversity of tundra communities. Wildlife values of the area are internationally significant; the wildlife are found in the wetlands, cliffs and estuaries, and offshore areas of the proposal. The area is also of interest because of the volcanic processes represented. Lava flows cover large areas in the southern part of the proposal. Ash explosion, unknown elsewhere in the arctic, have left deep crater lakes in the northern portion and buried, in near total preservation, a prehistoric ecosystem. The area will be managed jointly by the National Park Service and the Bureau of Sport Fisheries and Wildlife, pursuant to a joint management plan.

National Wildlife Refuge System

The proposed additions to the National Wildlife Refuge System are the results of investigations by the Bureau of Sport Fisheries and Wildlife. Enactment of these proposals would result in adding approximately 32 million acres to the National Wildlife Refuge System, presently estimated at 31 million acres. The areas would be administered as integral units of the National Wildlife Refuge System pursuant to the National Wildlife Refuge Administration Act of 1966 as amended (80 Stat. 927; 16 U.S.C. 668dd-ee), and would afford protection and preservation of nationally and internationally significant fish and wildlife populations and their habitats. Special emphasis is provided in these proposals to critical habitat areas of migratory birds, seabirds, endangered species, anadromous fish and marine mammals.

Within the framework of Federal and State laws, subsistence would be a recognized use of the fish, wildlife and plant resources in the refuges and the ranges. Refuge designation of proposed lands would not change laws applicable to existing subsistence, and authorized uses would continued until it is demonstrated that they are no longer necessary for human survival. Hunting, fishing and trapping will be allowed on the areas subject to applicable Federal and State laws. The Secretary of the Interior would be authorized, however, to regulate subsistence uses for such reasons as public safety and to prevent depletion of the resources and thereby insure sustained benefits for all Americans. Subject to valid existing rights, no use of the refuges and the ranges under United States mining and mineral leasing laws will be allowed without the express approval of the Secretary.

All areas, except the proposed "Noatak National Arctic Range, would be studied for possible inclusion in the National Wilderness Preservation System in accordance with subsection 3(c) and 3(d) of the Wilderness Act. A report would be made to the President and Congress within three years after establishment concerning their suitability or unsuitability for classification as wilderness. Certain rivers within the proposed refuges and ranges which have been studied and found to be suitable would be designated for protection under the provisions of the Wild and Scenic Rivers Act (82 Stat. 906; 16 U.S.C. 1271-1287).

Special efforts will be made to coordinate management of fish and wildlife resources on the refuges and ranges with that of native and State-owned lands and other Federal lands within, adjacent to and related to the refuges and the ranges.

Alaska Coastal National Wildlife Refuges

This proposal to add approximately 65,000 acres to the National Wildlife Refuge System includes several hundred rock islands, spires and cliffs located along, 1,500 miles of Alaskan coast. Two of the proposed refuges will be additions to existing refuges--the Bering Sea National Wildlife Refuge and the Kodiak National Wildlife Refuge--and the rest will go into three new refuges--Chukchi Sea, Shumagin Islands, and Barren Islands National Wildlife Refuges.

It is estimated that the nesting sites of four to six million seabirds are included within the land areas of this proposal. In addition to seabird nesting, all the units are important to one or more species of marine mammals including sea lions, walrus, sea otters and polar bears.

Commercial fisheries are of prime economic importance in the area below the Alaska Peninsula. Convention agreements permit international fishing zones to be located adjacent to the Shumagin Islands, Kodiak and Barren Islands units. Zones permitting loading and unloading of fish, fuel, and supplies are also located adjacent to the Shumagin Islands and Barren Islands units.

Arctic National Wildlife Refuge

Located in the northeast corner of Alaska, extending along the Canadian border from the Yukon basin to the Arctic Ocean, this proposal would establish a 3.76 million acre Arctic National Wildlife Refuge, and the existing 8.9 million acre Arctic National Wildlife Range withdrawn in 1960 by Public Land Order No. 2214 would be added to the refuge.

The magnitude and diversity of habitats account for the variety of fish and wildlife resources within the area. Nearly 130 species of migratory birds use these habitats. Also, 44 species of mammals depend upon the land base for their existence. Thirty-one species of waterfowl frequent tundra wetlands and adjacent coastal waters.

The area is a major migratory route for a variety of shorebirds and waterfowl. Birds from all four continental flyways follow inland routes and the Arctic coastal route to winter ranges around the world. Thousands of snow geese forage inland on the tundra in late summer and early fall during their annual migration. Of special interest are the endangered peregrine falcon, and possibly the Eskimo curlew which many fear is extinct.

The calving grounds of the Porcupine caribou herd (as many as 150,000 animals) are entirely within the existing Arctic National Wildlife Range and are of international importance.

Sixteen species of fish occur within the proposal including arctic grayling, anadromous and landlocked populations of arctic char, lake trout, chum salmon, northern pike, burbot and whitefish. Though no commercial fisheries exist, all species are important for subsistence use.

Iliamna National Resource Range

The proposed Iliamna National Resource Range includes approximately 2.85 million acres of land and water located on the northern end of the Alaska Peninsula between Cook Inlet and Bristol Bay.

The terrain is diversified and includes heavily glaciated mountains, alpine-like meadows, coastal bays, and numerous ponds and lakes. Lake Iliamna, in the heart of the region, is the seventh largest freshwater lake in the United States.

The Kvichak River system contains the greatest red salmon spawning grounds in the world and sustains a world-renowned freshwater trophy sport fishery. Kvichak River, which flows from Lake Iliamna to Bristol Bay has a watershed of 8,000 square miles, is 68 miles long, and has an estimated flow of 18,000 cubic feet per second. During the period 1960 through 1969, the Kvichak drainage contributed 55 percent of the red (sockeye) salmon caught in Bristol Bay, 33 percent of entire U.S. catch, and 16 percent of the world catch. The whole sale value of this commercial sockeye salmon fishery has averaged more than \$12,000,000 per year over the past ten years. In addition to the red salmon, pink, chum, king, and coho are also found within the proposal boundaries. The area supports a trophy sport fishery for grayling, arctic char, Dolly Varden, lake trout, rainbow trout, and pike. The fishery is the main economic resource of the area,

supporting extensive subsistence fishing, 4,000 licensed commercial fishermen, 4,000 to 6,000 support workers for the fishermen, 23 canning lines, several salteries and freezing facilities, and an array of small businesses supported by the sport fishery—guiding operations, lodges and transportation services.

More than 100 species of birds inhabit the area. Predatory birds include the bald eagle, peregrine falcon, osprey, and gyrfalcon, and Bristol Bay is the staging area for the entire world population of emperor geese and Pacific black brant.

The area would be added to the National Wildlife Refuge System and managed jointly by the Bureau of Sport Fisheries and Wildlife and the Bureau of Land Management of this Department pursuant to a cooperative management plan which will permit only such multiple use activities as are compatible with the protection and management of the nationally and internationally significant fish and wildlife resources of the range.

Koyukuk National Wildlife Refuge

Two units of land in the Koyukuk-Innoko area of Alaska are recommended to be set aside as the Koyukuk National Wildlife Refuge.

The area produces an annual fall flight averaging over 80,000 ducks and geese, and is an important staging area for other migratory birds. One hundred and forty bird species are common in the area. In addition, the many lakes and streams make the area prime habitats for furbearing animals, as well as moose, and salmon.

The Beaver Mountains caribou herd, made up of 3,000 animals, winters in the Innoko Unit. Black bear, grizzly bear, and moose inhabit both units. Forty percent of the entire Alaskan beaver catch is harvested in the Koyukuk-Innoko region, with approximately 80 percent of this catch from the Innoko Unit.

Noatak National Arctic Range

The Noatak National Arctic Range is proposed for addition to the National Wildlife Refuge System in northwestern Alaska for the protection of two major arctic valley ecosystems, now virtually unaffected by civilization.

Two river basins are proposed for inclusion in the Range, the Noatak and the Squirrel. The Noatak River rises in the central Brooks Range and flows westward for 450 miles to the sea at Kotzebue Sound. The Squirrel, 57 miles long and draining the Baird Mountains adjacent to the Noatak on the South, is the largest tributary of the Kobuk River.

Wildlife in the proposed range include the more than 200,000 migrants from the Arctic caribou herd (Alaska's largest), the barren-ground grizzly bear, Dall sheep, moose, wolves, wolverines, and migratory birds, including waterfowl, raptors, and several Asian species. The Noatak supports the most northerly major chum salmon run in Alaska and is noted also for arctic char.

The area will be added to the National Wildlife Refuge System and managed jointly pursuant to a cooperative management plan by the two Bureaus. In addition, the National Park Service will perform certain advisory functions. The management plan will provide for the protection of the natural features of the area, for scientific research, enhancement of aboriginal cultural uses and primitive types of low density outdoor recreation. Our proposal calls for a report to Congress on future administration and management of the area within twenty years of its establishment.

Selawik National Wildlife Refuge

Approximately 1.4 million acres in the Selawik Lake area of Alaska is recommended for designation as the Selawik National Wildlife Refuge. The Chamisso National Wildlife Refuge, established in 1940 by Proclamation no. 2416 will be redesignated as part of the Selawik National Wildlife Refuge and added to the refuge.

The proposal, located on the Arctic Circle, is 200 miles west-north west of Fairbanks. The Selawik River is the main water course within the proposal. The many forms of wildlife, especially migratory waterfowl of international significance are perhaps the region's greatest natural resource. The proposed refuge produces about a third of the waterfowl within the region; a majority of the remainder, including all the black brant, cackling Canada geese, emperor geese and eiders, are produced in the adjacent areas. The Eskimo curlew, thought to be extinct or nearly so, was formerly an abundant nester in this region and may yet be found in the area,

Mammals include black and grizzly bear, wolves, wolverine, moose, and arctic fox; more than 50 species are represented. A large part of the 240,000 caribou of the Arctic herd winters along the Selawik drainage. Marine mammals, including whales, seals, and walruses, are found in the coastal waters adjacent to the refuge.

Fish species present in the area include whitefish, cisco, grayling, Dolly Verden, and lake trout. Anadromous species include silver, chum, king, and pink salmon.

Togiak National Wildlife Refuge

A 2.74 million acre area of coastal mountains between Bristol Bay and Kuskokwim Bay in southwestern Alaska is proposed for designation as the Togiak National Wildlife Refuge. The area is 400 miles west of Anchorage and is adjacent to the precipitous rock cliffs of Cape Newenham National Wildlife Refuge, one of the most important nesting areas for seabirds in Alaska. This 247,700 acre refuge will be added to the Togiak National Wildlife Refuge.

The area is the crossroads for waterfowl and shorebirds coming from wintering areas through the Pacific Ocean. Birds from the Asiatic route, mid-Pacific route, and the North American Pacific Flyway funnel through the area. The coastal zone is the breeding ground for all types of migrating waterbirds.

The proposed refuge has one of the most diverse mammalian faunas of any area in the State with 32 species of land mammals. In addition, walrus, sea lions, and 4 species of seals occur in the adjacent coastal waters and occasionally haul out on the shores of the proposed refuge.

The many rivers and lakes in the proposed refuge contain abundant stocks of anadromous and resident fishes. Anadromous fish of interest include whitefish, steelhead, and king, sockeye, coho, pink, and chum salmon. Resident species include rainbow, Dolly Verden, and lake trout, arctic grayling, and arctic char.

Yukon Delta National Wildlife Refuge

The alluvial deposits of the Yukon and Kuskokwim Rivers have, through the centuries, formed a vast river delta stretching 250 miles north to south and 200 miles east to west. This flat and nearly treeless delta contain typical arctic tundra in which have formed thousands of ponds and lakes varying in size from less than an acre to many thousands of acres. Approximately 5.16 million acres of the Yukon-Kuskokwim River Delta area of Alaska, including the 2.8 million acre Clarence Rhode National Wildlife Refuge, are recommended for designation as a National Wildlife Refuge.

The Delta produces about 80 percent of the swans and nearly all of the white-fronted geese utilizing the Pacific Flyway; also more than half of the continental population of black brant, 80 percent of the emperor geese, and nearly all of the cackling geese are produced in this area. No other area of similar size is known to be as critical to so many species.

Most of the mammals common in Alaska, except the high mountain species, are represented. Forty-three species have been noted, though populations are not great. Marine species historically have been a major element in the subsistence economy of residents in the coastal villages.

The large fishery resource of the Delta is the primary factor which permitted development of the large aboriginal population in the region; subsistence and commercial fisheries are major elements in the present economy of the area. The 1972 commercial catch totalled 6.5 million pounds of king, chum, sockeye, pink and, silver salmon and migrating smelt.

Yukon Flats National Wildlife Refuge

Approximately 3.59 million acres of the Yukon River Valley in east central Alaska, are recommended for designation as a National Wildlife Refuge. The unit, a level flood plain basin bisected by the Yukon River and ringed with highlands, occupies the western half of the largest of Alaska's interior valleys.

Water is the dominant natural feature of the Yukon Flats region which contains more than 25,000 miles of streams and approximately 40,000 small lakes and ponds encompassing over 800,000 acres. One hundred and thirty species of birds have been identified on the Yukon Flats. Twenty species of the waterfowl nest on the proposed refuge and contribute about 720 thousand birds each year to Canada, the United States, and Mexico. The density of nesting ducks is estimated at 99 per square mile, greater than any other large area in Alaska.

Fish resources include both anadromous and resident species. Little commercial use is made of the fishery resource as far upstream as the Yukon Flats. The fish habitat of the area is essential to anadromous species harvested commercially in the lower reaches of the river and to the Bering Sea salmon fishery.

National Forest System

Title III of this proposal would designate three new National Forest units -- the Porcupine (5.5 million acres), the Yukon-Kuskokwim (7.3 million acres), and the Wrangell Mountains (5.5 million acres). In addition, the draft legislation would provide for addition of 500,000 acres of the existing Chugach National Forest to consolidate the Forest boundaries.

The proposed legislation would also designate, within the above units, all or portions of the Bremner, Porcupine, Nowitna and Sheenjek Rivers as components of the National Wild and Scenic Rivers System.

The areas recommended for inclusion in the National Forest System are those withdrawn areas which have (1) nationally significant values that should be retained in public ownership to assure permanency of protection and continuity of management and (2) the resources offer a balance of uses that would be better managed under multiple use principles than under a dominant or more limited combination of uses. In addition, it was deemed necessary that the areas be in manageable units such as those delineated by drainages, ecological relationships, or existing or proposed transportation systems.

The 1960 Multiple Use-Sustained Yield Act is the basic mandate for administration and management of the National Forests. The Act directs that the National Forests are established and are to be administered for outdoor recreation, range, timber, watershed and wildlife and fish purposes.

The establishment and maintenance of areas of wilderness are consistent with the purposes of the Multiple Use-Sustained Yield Act. The Forest Service intends to consider wilderness along with other resources in its multiple use planning process. It expects to propose and identify wilderness study areas within three years after the establishment of the proposed National Forests.

In accordance with the general mining laws, exploration and development of "locatable" minerals would be permitted. These laws allow individuals to prospect, locate, mine and remove minerals and to obtain patents to valid claims. These authorized activities are subject to National Forest rules and regulations containing appropriate environmental safeguards.

Chugach National Forest

Two isolated areas, formerly in public domain but adjacent to the Chugach National Forest are proposed as additions to the National Forest System. These areas were formerly public domain isolated by the Forest Reserve proclamations of the early 1900's because of their lack of commodity resources.

The College Fiord is 161 thousand acres in Prince William Sound. An icy and mountainous hinterland rising from sea level to over 10,000 feet, it is mostly rock and ice with 17 glaciers. Rainfall varies from 150 to 300 inches annually. Scant vegetation consists of a near sea level fringe of sitka spruce, cottonwood and mountain hemlock grading upward through alder thickers to alpine mats and heath.

The Sargent Ice Field or Nellie Juan unit is a 276 thousand acre block on the Kenai Peninsula northeast of Seward. Principally ice and mountain tops, glaciers feed the Nellie Juan river which flows through a glacier-carved valley into Prince William Sound at King's Harbor. The area's vegetation is alpine tundra except for scattered riparian growth in the river flood plains and occasional mountain hemlock.

Porcupine National Forest

This 5.5 million acre proposal for the Porcupine National Forest is located in the eastcentral part of the Alaska Interior. A combination of broad river flats and low-lying hills, the area is endowed with many lakes and waterways. North America's fourth longest river, the Yukon, is joined by the Porcupine flowing west from Canada. Out of the Brooks Range to the north, spring the Rapid, Sheenjek and Coleen while the Black and Little Black meander through, draining the southeast portion of the unit. The area is characterized by extreme seasonal variations in climate. The northern half, above the Arctic Circle, experiences the summer's midnight sun and winter's prolonged darkness. Seventy percent forested, many of the area's seven ecosystems result from succession following riverbottom changes and forest fires.

The Porcupine proposal contains the eastern extension of the Yukon Flats, a major waterfowl breeding area. Upland wildlife, big game and important fisheries habitat exist. Sportfishing, hunting and river and lake oriented activities could provide the greatest recreation experiences in this area.

The densely forested area includes 750 million board feet of commercially valuable sawtimber as well as being highly valued for wildlife habitat and watershed protection. Old Indian sites and the rich history of the Hudson's Bay company lend romance to the area. These sites will be protected and archeological studies encouraged.

Wrangell Mountain National Forest

The proposed Wrangell Mountains National Forest, an area of 5.5 million acres, is located in southeastern interior Alaska. With some of the most spectacular mountain country in North America, it includes parts of the Wrangell Mountains, the coastal Chugach Mountains and the eastern tip of the Alaska Range. Rugged peaks rise to 16,000 feet in elevation and large ice fields feed massive glaciers. The Copper River courses south through a portion of the unit and drains most of the central and southern parts. The Chitina and Bremner Rivers are important tributaries. The climate is a typically sub-arctic continental with long cold winters, short warm summers, and precipitation which is low in the valleys and high in the mountains. Ten ecosystems and related vegetation types are represented. These range from the coastal coniferous forests to the high alpine tundra. Most of the area exhibits effects of glaciation, and permafrost is common. The Wrangells unit is one of the more road accessible areas in Alaska. Light planes are also a major means of access.

Forests cover about 30 percent of the area and are chiefly valued for watershed protection, wildlife habitat, and recreational opportunities. Major stream and river systems stemming from the vast mountain-glacier complex of the Wrangell and Chugach Ranges provide many water-based resource values. Of exceptional importance are habitat for wildlife and fish, water oriented recreation.

Yukon-Kuskokwim National Forest

Spanning the middle Yukon and Kuskokwim River Valleys, this 7.3 million acre area is proposed as the Yukon-Kuskokwim National Forest. Lying across the Kuskokwim Mountains on the north and flanked by the Alaska Range on the south, the area contains extensive forests, shrub thickets, bogs and marshes and other ecosystems of the subarctic. Characterized

by winters of extended subzero temperatures and summers in the mid 70's or above, this area experiences a brief, but productive growth cycle. Summer drought contributes to a pattern of frequent wildfire.

Over three-fourths of this area is forested, and commercial timber stands occur on more than one million acres. Providing up to two billion board feet of timber, this area, combined with surrounding ownerships could support a major forest products industry.

Wild and Scenic Rivers Located
Outside of Units of the National
Park, Refuge and Forest Systems

Title IV of the enclosed legislation proposes four river segments for addition to the wild and scenic rivers system that are not located within units of the park, refuge and forest systems. These four river segments are on public domain lands and will be administered by the Bureau of Land Management.

The river components are as follows:

1. Beaver Creek -- a 135-mile segment, totalling 200,000 acres, to be classified as a wild river. The river is located 50 miles north of Fairbanks, between Fairbanks and Circle. The river is excellent canoeing water and provides good fishing and hunting opportunities. The limestone peaks of the White Mountains form an almost continuous scenic background. Large mammals abound.
2. Birch Creek -- a 135-mile segment, totalling 200,000 acres, to be classified as a wild river. The river is located approximately 65 miles northeast of Fairbanks, between Fairbanks and Circle. There are numerous sites for camping and the river is an excellent family canoeing stream throughout. Good fishing and hunting opportunities are present. The river flows through a wide valley with moderately steep forested slopes. As Birch Creek flows into the Yukon flats, it becomes a slow, meandering river.
3. Fortymile -- approximately 375 miles, including tributaries, totalling 320,000 acres, to be classified variously as wild, scenic and recreational. The river segment is located in east-central Alaska and runs up to the Canadian border. The river and tributaries vary in the headwaters from small, shallow, swift streams, to meandering muskeg and become large, canyon-bound streams with numerous rapids in the middle and lower portions. Portions show evidence of placer gold mining and early settlements. Recreational gold mining can be tried with some probability of success. Hunting, fishing and canoeing are good. Hiking and camping opportunities abound.
4. Unalakleet -- approximately 60 miles, totalling 104,000 acres, to be classified as a wild river. The river is located south of the Seward Peninsula and empties into Norton Sound; the downstream river segment boundary is approximately 24 miles above the mouth. The Unalakleet Valley is generally four to five miles wide. Bluffs characterize some 20 miles of the Unalakleet before it widens to 500 feet near its mouth. Dense stands of white spruce along the

shore screen the view of adjacent areas. The river is renowned for its sport fishing. King, chum, and pink salmon; grayling; and arctic char are excellent. There is also hunting, primarily for moose, with some caribou and bear, along the river. The Kaltag Trail passes along the south side of the river; it is a link in the historic 1000 mile Iditarod Gold Rush Trail between Nome and Anchorage; the existing trail will be preserved.

The legislation provides that the Secretary shall take action required under section 3(b) -- designating exact boundaries and preparing development plans -- within three years after date of enactment for the Beaver Creek component, within two years for Birch Creek, within one year for Fortymile and within four years for Unalakleet. It also provides that the total acreage figures for specific components specified in the bill will supercede the acreage limitations contained in the Wild and Scenic Rivers Act. All of the acreage of the wild river components is withdrawn, subject to valid existing rights, from all forms of appropriation under the mining laws and from operation of the mineral leasing laws. Existing law limits these withdrawals to 1/4 mile from the bank of the river. Specific provision is made for such access across the Fortymile as the Secretary determines to be necessary to permit development of asbestos deposits in the North Fork drainage.

The Office of Management and Budget has advised that this legislative proposal is in accord with the program of the President.

Sincerely yours,


Secretary of the Interior

IN THE SENATE OF THE UNITED STATES

JANUARY 30, 1974

Mr. JACKSON (for himself and Mr. FANNIN) (by request) introduced the following bill; which was read twice and referred to the Committee on Interior and Insular Affairs

A BILL

To provide for the addition of certain lands in the State of Alaska to the National Park, National Wildlife Refuge, National Forest, and the Wild and Scenic Rivers Systems, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That, having reviewed the recommendations of the Secre-
4 tary of the Interior made pursuant to sections 17 (d) (1)
5 and 17 (d) (2) of the Alaska Native Claims Settlement Act
6 (85 Stat. 688) for addition of certain lands in Alaska to
7 the National Park, Forest, Wildlife Refuge, and Wild and
8 Scenic Rivers Systems, the Congress designates and estab-

lishes new units and additions to existing units of those systems, subject to the provisions of the following titles.

SEC. 2. This Act may be cited as the "Alaska Conservation Act of 1974".

TITLE I—NATIONAL PARK SYSTEM

PART A—ADDITIONS TO EXISTING AREAS

MOUNT MCKINLEY NATIONAL PARK

SEC. 101. (a) In order to include within Mount McKinley National Park (hereinafter referred to in this section as the "park") certain areas needed to provide a diversity of habitat, insure the preservation of animal ecosystems, and protect and interpret associated scenic resources and glacial features, the boundary of the park is hereby revised to include, subject to valid existing rights, the lands, waters, and interests therein depicted as within the proposed boundary of the park on the map entitled "Mount McKinley National Park", numbered 126-90-001, and dated December 1973, which additional area comprises approximately three million one hundred and eighty thousand acres.

(b) Section 4 of the Act of February 26, 1917 (39 Stat. 938; 16 U.S.C. 350), is repealed. Section 2 of the Act of January 26, 1931 (46 Stat. 1043; 16 U.S.C. 350a), is revised to read as follows: "The Secretary of the Interior shall have authority to prescribe regulations for the surface

1 use of any valid mining locations made within the boundaries
2 of Mount McKinley National Park.”.

3 (c) Section 6 of the Act of February 26, 1917 (39
4 Stat. 939), as amended (16 U.S.C. 352), is further amended
5 by changing the period at the end thereof to a comma, and
6 adding the following: “or for subsistence uses in areas added
7 to the park by the Alaska Conservation Act of 1974 pursu-
8 ant to section 108 of that Act.”.

9 (d) In furtherance of the purposes set forth in subsec-
10 tion (a) of this section, the area adjacent to the south and
11 east boundary of the park generally depicted on the map re-
12 ferred to in subsection (a) as “Cooperative Planning and
13 Management Zone” is hereby designated as a zone within
14 which resource use and development are critical to the
15 proper protection, management, and interpretation of the
16 park. Not later than three years from the date of enactment
17 of this title, the Secretary of the Interior (hereinafter re-
18 ferred to as the “Secretary”) shall submit a report to the
19 Congress as to whether land-use controls needed for the
20 proper protection, management, and interpretation of the
21 park have been instituted effectively with respect to the
22 designated zone by the State of Alaska or an appropriate
23 political subdivision thereof. The Secretary shall solicit the
24 views of the Governor of the State of Alaska and of the Joint
25 Federal-State Land Use Planning Commission for Alaska

1 on his report, and he shall submit any such views to the Con-
2 gress at the time the report is submitted.

3 KATMAI NATIONAL PARK

4 SEC. 102. (a) In order to include therein certain areas
5 needed for the protection of critical animal habitat, including
6 a watershed necessary for the perpetuation of red salmon and
7 a habitat to protect a population of brown bear, and for the
8 interpretation and preservation of outstanding scenic and
9 scientific values associated with such habitats, the boundary
10 of Katmai National Monument, as established by Proclama-
11 tion Numbered 1487 of September 24, 1918 (40 Stat.
12 1855), and revised by Proclamation Numbered 1949 of
13 April 24, 1931 (47 Stat. 2453), Proclamation Numbered
14 2564 of August 4, 1942 (56 Stat. 1972), and Proclama-
15 tion Numbered 3890 of January 20, 1969 (83 Stat. 926) is
16 hereby revised to include, subject to valid existing rights,
17 the lands, waters, and interests therein depicted as within the
18 proposed boundary of the park on the map entitled "Katmai
19 National Park", numbered 127-90-001, and dated Decem-
20 ber 1973, which additional area comprises approximately
21 one million eight hundred and seventy thousand acres.

22 (b) The Katmai National Monument is hereby redes-
23 ignated as Katmai National Park.

1 PART B—ESTABLISHMENT OF NEW AREAS

2 SEC. 103. (a) In order to protect and interpret for the
3 benefit, inspiration, and education of present and future gen-
4 erations the scenic, scientific, biological, archeological, and
5 historical values associated therewith, there are hereby es-
6 tablished, subject to valid existing rights—

7 (1) Aniakchak Caldera National Monument, the
8 boundary of which shall include the lands, waters, and
9 interests therein depicted as within the proposed bound-
10 ary of the national monument on the map entitled
11 “Aniakchak Caldera National Monument”, numbered
12 NM-AC-90,001, and dated December 1973, which
13 area comprises approximately four hundred and forty
14 thousand acres;

15 (2) Harding Ice Field-Kenai Fjords National Mon-
16 ument, the boundary of which shall include the lands,
17 waters, and interests therein depicted as within the pro-
18 posed boundary of the national monument on the map
19 entitled “Harding Ice Field-Kenai Fjords National Mon-
20 ument”, numbered NM-HI/KF-90,001 and dated De-
21 cember 1973, which area comprises approximately three
22 hundred thousand acres: *Provided*, That the Secretary
23 may revise the monument boundary to include any lands,

1 waters, and interests therein depicted on such map as
2 within the area marked "Potential additions" if such
3 lands, waters, and interests therein are not selected by
4 native corporations pursuant to the Alaska Native Claims
5 Settlement Act;

6 (3) Cape Krusenstern National Monument, the
7 boundary of which shall include the lands, waters, and
8 interests therein depicted as within the proposed bound-
9 ary of the national monument on the map entitled "Cape
10 Krusenstern National Monument", numbered NM-CK-
11 90,001, and dated December 1973, which area comprises
12 approximately three hundred and fifty thousand acres;

13 (4) Kobuk Valley National Monument, the bound-
14 ary of which shall include the lands, waters, and inter-
15 ests therein depicted as within the proposed boundary of
16 the national monument on the map entitled "Kobuk
17 Valley National Monument", numbered NM-KV-
18 90,001, and dated December 1973, which area com-
19 prises approximately one million eight hundred and fifty
20 thousand acres: *Provided*, That, any lands within the
21 Onion Portage Archeological District, as depicted on
22 such map, not selected by a Native corporation pursuant
23 to the Alaska Native Claims Settlement Act shall become
24 part of the national monument;

1 (5) Lake Clark National Park, the boundary of
2 which shall include the lands, waters, and interests
3 therein depicted as within the proposed boundary of the
4 national park on the map entitled "Lake Clark National
5 Park", numbered NP-LC-90,001, and dated Decem-
6 ber 1973, which area comprises approximately two
7 million six hundred and ten thousand acres;

8 (6) Wrangell-Saint Elias National Park, the bound-
9 ary of which shall include the lands, waters, and inter-
10 ests therein depicted as within the proposed boundary
11 of the national park on the map entitled "Wrangell-
12 Saint Elias National Park", numbered NP-WSE-90,-
13 001, and dated December 1973, which area comprises
14 approximately eight million six hundred and forty thou-
15 sand acres;

16 (7) Gates of the Arctic National Park, the bound-
17 aries of which shall include the lands, waters, and inter-
18 ests therein depicted as within the proposed boundaries
19 of the park on the map entitled "Gates of the Arctic
20 National Park", numbered NP-GA-90,001 and dated
21 December 1973, which park comprises approximately
22 eight million three hundred and sixty thousand acres;

23 (8) Yukon-Charley National Rivers, the boundary
24 of which shall include the lands, waters, and interests

1 therein depicted as within the proposed boundary of the
2 national rivers on the map entitled "Yukon-Charley Na-
3 tional Rivers", numbered NR-YC-90,001, and dated
4 December 1973, which area comprises approximately
5 one million nine hundred and seventy thousand acres.

6 (9) Chukchi-Imuruk National Reserve, the bound-
7 ary of which shall include the lands, waters, and inter-
8 ests therein depicted as within the proposed boundary
9 of the national reserve on the map entitled "Chukchi-
10 Imuruk National Reserve", numbered NR-CI-90,001,
11 and dated December 1973, which area comprises ap-
12 proximately two million six hundred and ninety thou-
13 sand acres.

14 (b) The boundary maps referred to in part A of this
15 title and this part shall be on file and available for public
16 inspection in the offices of the National Park Service, De-
17 partment of the Interior; the maps entitled "Chukchi-Imuruk
18 National Reserve" and "Harding Ice Field-Kenai Fjords
19 National Monument" shall also be on file at the Bureau of
20 Sport Fisheries and Wildlife, Department of the Interior.
21 In no event shall the boundary of any area added to existing
22 areas or established by part A of this title or this part extend
23 beyond the territorial sea.

1 PART C—GENERAL ADMINISTRATION PROVISIONS

2 ADMINISTRATION

3 SEC. 104. (a) The Secretary shall administer the lands,
4 waters, and interests therein added to existing areas or es-
5 tablished by the foregoing sections of this title as areas of
6 the national park system, subject to the applicable provi-
7 sions of this title and the Act of August 25, 1916 (39 Stat.
8 535 et seq.), as amended and supplemented (16 U.S.C. 1
9 et seq.).

10 (b) The Secretary of Agriculture and the Secretary of
11 the Interior shall consult in the development of manage-
12 ment plans for the Wrangell Mountains National Forest and
13 the adjoining Wrangell-Saint Elias National Park to achieve
14 the fullest possible coordination and cooperation. In addi-
15 tion, the Secretary of Agriculture shall, in cooperation with
16 the Secretary of the Interior, select and develop one or more
17 areas along the Alaska Highway between the Canadian
18 border and the village of Northway, Alaska, together with
19 other interested public agencies, for public use, administra-
20 tion, interpretation, and other provision of facilities. Funds
21 appropriated for purposes of this title shall be available for
22 the development and operation of such facilities.

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1
2 SEC. 105. Following reasonable notice in writing to the
3 Committees on Interior and Insular Affairs of the Senate
4 and House of Representatives, and after publication of notice
5 in the Federal Register, the Secretary may make minor re-
6 visions in the boundaries of the areas added to existing areas
7 or established by parts A and B of this title, including re-
8 visions to include within the boundaries such additional lands
9 as are necessary for administrative sites but such adminis-
10 trative sites shall not exceed eighty acres for any one area
11 added to existing areas or established by parts A and B.
12 Within the boundaries of the areas added to existing units
13 or established by parts A and B of this title, or as such
14 boundaries may be revised pursuant to this section, the
15 Secretary is authorized to acquire lands, waters, and inter-
16 ests therein by donation, purchase, or exchange, except that
17 property owned by the State of Alaska or any political sub-
18 division thereof may be acquired only by donation or ex-
19 change, and property owned by any Native village or cor-
20 poration may be acquired only with the concurrence of such
21 owner.

22 APPLICABILITY OF MINING AND MINERAL LEASING LAWS

23 SEC. 106. (a) Except as provided in subsection (b)
24 of this section, Federal lands within the boundaries of the
25 areas added to existing units or established by parts A and B

1 of this title, or as such boundaries may be revised pursuant
2 to section 105 of this part, as well as Federal lands within
3 the boundaries of Mount McKinley National Park as of the
4 date of enactment of this title, are, subject to valid existing
5 rights, hereby withdrawn from location, entry, and patent
6 under the public land laws of the United States, including
7 from all forms of appropriation under the United States
8 mining laws, and from operation of the mineral leasing laws
9 including, in both cases, amendments thereto. Any mining
10 claims located under the mining laws of the United States
11 within the boundaries of those areas withdrawn pursuant to
12 this subsection must be recorded with the Secretary under
13 regulations established by the Secretary within one year
14 after the effective date of such regulations. Any mining claim
15 not so recorded shall be conclusively presumed to be aban-
16 doned and shall be void. Such recordation will not render
17 valid any claim which was not valid on the effective date
18 of this title, or which becomes invalid thereafter. Any claim
19 recorded pursuant to the regulations promulgated under this
20 subsection, for which the claimant has not made application
21 for a patent within three years from the date of recordation,
22 shall be presumed to be invalid unless the claimant presents
23 to the Secretary clear evidence of its validity.

24 (b) Lands outside the Charley River watershed which
25 are within the Yukon-Charley National Rivers, are not with-

1 drawn from operation of the mineral leasing laws, including
2 amendments thereto, and the Mineral Leasing Act of Feb-
3 ruary 25, 1920, as amended and supplemented (30 U.S.C.
4 181-263), shall apply to them: *Provided*, That, the Secre-
5 tary may administratively cancel any lease or prospecting
6 permit for violations of the terms of the lease or permit or of
7 regulations issued pursuant to the Mineral Leasing Act of
8 February 25, 1920, without regard to the requirements of
9 section 31 of such Act (30 U.S.C. 188), after thirty days'
10 notice to the lessee or permittee and failure of the lessee or
11 permittee to correct the condition giving rise to the breach.
12 With respect to mineral deposits located within such lands
13 normally subject to location, entry, and patent under the
14 mining laws and withdrawn pursuant to subsection (a) of
15 this section, the Secretary may issue permits for the explora-
16 tion and development of said deposits pursuant to regulations
17 establishing procedures, terms, and conditions under which
18 such activity may be conducted, but with right of occupation
19 and use of only so much of the surface of the land as is im-
20 mediately and directly necessary to the exploration and de-
21 velopment of said deposits.

22 SPORT HUNTING

23 SEC. 107. (a) Subject to subsection (b) of this sec-
24 tion, and except as may otherwise be prohibited by Federal
25 or State law, the Secretary shall permit sport hunting on

1 lands and waters under his jurisdiction within the areas es-
2 tablished by paragraphs (a) (1) and (a) (5)–(9) of section
3 103 of this title in accordance with such regulations as he
4 shall prescribe. Such regulations may include the establish-
5 ment of limits on the numbers and types of species that may
6 be taken and the manner of taking, or prohibit takings. The
7 Secretary may, however, designate zones where, and estab-
8 lish periods when, no sport hunting shall be permitted in any
9 such area for reasons of public safety, administration, fish or
10 wildlife management, or public use and enjoyment, and ex-
11 cept in emergencies, any regulations of the Secretary pur-
12 suant to this section shall be put into effect only after con-
13 sultation with the appropriate fish and game agency of the
14 State of Alaska.

15 (b) With regard to the area referred to in section 103
16 (a) (1) of this title, the Secretary shall permit sport hunting
17 only in the townships described as follows:

18 Seward Meridian (Protraction Description)

19 (All Fractional)

20 Township 38 south, range 51 west.

21 Township 39 south, range 51 west.

22 Township 39 south, range 52 west.

23 Township 40 south, range 52 west.

24 Township 40 south, range 53 west.

25 Township 40 south, range 54 west.

1 Township 41 south, range 51 west.

2 Township 41 south, range 52 west.

3 Township 41 south, range 53 west.

4 Township 41 south, range 54 west.

5 (c) Not later than ten years from the date of enactment
6 of this title, and continuing at intervals of not more than five
7 years after the submission of the first such report, the Sec-
8 retary shall report to the Congress on the effect of all hunt-
9 ing, fishing, and trapping, including subsistence uses, on the
10 flora and fauna within each area added to existing units or
11 established by parts A and B of this title, and shall recom-
12 mend whether any or all of such uses shall be continued.

13 SUBSISTENCE USES

14 SEC. 108. Except as may otherwise be prohibited by
15 Federal or State law, the Secretary shall permit the continu-
16 ation of such subsistence uses of the fish, wildlife, and plant
17 resources within the areas added to existing units or estab-
18 lished by parts A and B of this title to the extent that such
19 uses were in effect on the date of enactment of the Alaska
20 Native Claims Settlement Act. Such uses shall continue un-
21 less the Secretary determines that particular uses are mate-
22 rially and negatively affecting the fish, wildlife, or plant re-
23 sources of such areas: *Provided*, That, for such reasons as
24 public safety, administration, fish and wildlife management,
25 or public use and enjoyment, the Secretary may, by regula-

1 tion, prescribe conditions under which such subsistence uses
2 shall be conducted including, but not limited to, prohibitions
3 on takings, and the establishment of limits on the number
4 and type of resources taken, and the season when and area
5 within such areas where subsistence activities can be under-
6 taken. Regulations promulgated pursuant to this section shall
7 be put into effect only after consultation with the appropri-
8 ate fish and game agency of the State of Alaska.

9 COOPERATIVE AGREEMENTS

10 SEC. 109. (a) The Secretary is authorized to cooperate
11 and seek agreements with the heads of other Federal agen-
12 cies and the owners of lands and waters within, adjacent to,
13 or related to each area added to existing units or established
14 by parts A and B of this title, including, without limitation,
15 the State of Alaska or any political subdivision thereof, any
16 Native corporation, village, or group having traditional cul-
17 tural or resource-based affinities for such areas, and, with the
18 concurrence of the Secretary of State, the governments of
19 foreign nations. Such agreements shall have as their purpose
20 the assurance that resources will be used, managed, and de-
21 veloped in such a manner as to be consistent with the pres-
22 ervation of the environmental quality of such areas. The
23 agreements may also provide for access by visitors to the
24 park system units to and across the lands which are the
25 subject of the agreements.

(b) The head of any Federal agency, other than agencies that are parties to cooperative agreements pursuant to subsection (a) of this section, having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in the lands and waters within, adjacent to, or related to areas added to existing units or established by parts A and B of this title, and the head of any Federal department or interdepartmental agency, other than parties to such agreements, having authority to license any undertaking in such lands and waters shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, afford the Secretary a reasonable opportunity to comment with regard to such undertaking.

15 WILDERNESS REVIEW

16 SEC. 110. Within three years from the date of enactment
17 of this title, the Secretary shall report to the President, in
18 accordance with subsections 3 (c) and 3 (d) of the Wilder-
19 ness Act (78 Stat. 892; 16 U.S.C. 1132 (c) and (d)), his
20 recommendations as to the suitability or nonsuitability of any
21 area added to existing units or established by parts A and B
22 of this title for preservation as wilderness; any designation
23 of any such area as wilderness shall be accomplished in ac-
24 cordance with said subsection of the Wilderness Act. Not-
25 withstanding anything to the contrary in the Wilderness Act,

1 the Secretary shall, with respect to Mount McKinley Na-
2 tional Park, report to the President his recommendations as
3 to the suitability of any area within the entire park within
4 three years and from the date of enactment of this title.

5 PART D—WILD AND SCENIC RIVERS

6 DESIGNATION

7 SEC. 111. Section 3 (a) of the Wild and Scenic Rivers
8 Act (82 Stat. 907), as amended (16 U.S.C. 1274 (a)), is
9 further amended by adding the following new paragraphs:

10 “ . ALATNA, ALASKA. The seventy-five mile portion
11 of the main stem within the Gates of the Arctic National
12 Park; to be administered by the Secretary of the Interior.

13 “ . ANIAKCHILAK ALASKA.—The entire river, includ-
14 ing its major tributaries, Hidden Creek, Mystery Creek, Al-
15 bert Johnson Creek, and North Fork Aniakchak River,
16 within the Aniakchak Caldera National Monument; to be
17 administered by the Secretary of the Interior.

18 “ . CHARLEY, ALASKA.—The entire river, including
19 its major tributaries, Copper Creek, Bonanza Creek, Hos-
20 ford Creek, Derwent Creek, Flat-Orthmer Creek, Crescent
21 Creek, and Moraine Creek, within the Yukon-Charley Na-
22 tional Rivers; to be administered by the Secretary of the
23 Interior.

24 “ . KILLIK, ALASKA.—The entire river, including its

1 major tributary, Easter Creek, within the Gates of the Arctic
2 National Park; to be administered by the Secretary of the
3 Interior.

4 “ . NOATAK, ALASKA.—The sixty-five mile segment
5 within the Gates of the Arctic National Park; to be admin-
6 istered by the Secretary of the Interior.

7 “ . SALMON, ALASKA.—The entire river within the
8 Kobuk Valley National Monument; to be administered by
9 the Secretary of the Interior.

10 “ . TINAYGUK.—The entire river, and the North Fork
11 of the Koyukuk, within the Gates of the Arctic National
12 Park; to be administered by the Secretary of the Interior.”

13 ADMINISTRATIVE PROVISIONS

14 SEC. 112. (a) The river segments designated in section
15 111 of this title are hereby classified and designated, and
16 shall be administered, as wild river areas pursuant to the
17 Wild and Scenic Rivers Act.

18 (b) The provisions of subsection 3 (b) and section 6 of
19 the Wild and Scenic Rivers Act shall not apply to the river
20 segments listed in section 111 of this title. The provisions of
21 sections 107 and 108 of this title shall supersede those of
22 section 13 (a) of the Wild and Scenic Rivers Act, concerning
23 fish and wildlife.

24 PART E—APPROPRIATION AUTHORIZATION

25 SEC. 113. There is hereby authorized to be appropriated
26 such sums as may be necessary for the purposes of this title.

1 depicted as the "proposed boundary" on the maps entitled
2 "Alaska Coastal National Wildlife Refuges", and dated De-
3 cember 1973. The Kodiak National Wildlife Refuge as desig-
4 nated in Executive Order Numbered 8857 of August 19,
5 1941, and modified by Public Land Order Numbered 1634 of
6 May 9, 1958, and the additions designated in this subsection
7 are hereby established as the "Kodiak National Wildlife
8 Refuge"; and the Bering Sea National Wildlife Refuge as
9 designated in Proclamation Numbered 2416 of July 15,
10 1940, amending Executive Order Numbered 1037 of Febru-
11 ary 27, 1909, and the additions designated in this subsection
12 are hereby established as the "Bering Sea National Wildlife
13 Refuge".

14 (2) The Arctic National Wildlife Refuge as herein es-
15 tablished shall be comprised of approximately 3.76 million
16 acres of lands, waters, and interests therein within the area
17 generally depicted as the "proposed boundary" on the map
18 entitled "Arctic National Wildlife Refuge", and dated De-
19 cember 1973, and the Arctic National Wildlife Range, estab-
20 lished by Public Land Order Numbered 2214 of December 6,
21 1960, issued pursuant to Executive Order Numbered 10355
22 of May 26, 1952, is hereby redesignated as part of the
23 Arctic National Wildlife Refuge and added to said refuge.

24 (3) The Iliamna National Resource Range as herein
25 established shall be comprised of approximately 2.85 million

1 acres of lands, waters, and interests therein within the area
2 generally depicted as the "proposed boundary" on the map
3 entitled "Iliamna National Resource Range", and dated
4 December 1973.

5 (4) The Koyukuk National Wildlife Refuge as herein
6 established shall be comprised of approximately 4.43 mil-
7 lion acres of lands, waters, and interests therein within the
8 area generally depicted as the "Proposed Boundary" on the
9 map entitled "Koyukuk National Wildlife Refuge", and
10 dated December 1973.

11 (5) The Noatak National Arctic Range as herein es-
12 tablished shall be comprised of approximately 7.59 million
13 acres of lands, waters, and interests therein within the area
14 generally depicted as the "Proposed Boundary" on the map
15 entitled "Noatak National Arctic Range", and dated De-
16 cember 1973.

17 (6) The Selawik National Wildlife Refuge as herein
18 established shall be comprised of approximately 1.4 million
19 acres of lands, waters, and interests therein within the area
20 generally depicted as the "Proposed Boundary" on the map
21 entitled "Selawik National Wildlife Refuge", and dated
22 December 1973, and the Chamisso National Wildlife Refuge
23 established by Proclamation Numbered 2416 of July 15,
24 1940, amending Executive Order Numbered 1658 of Decem-

ber 7, 1912, is hereby redesignated as part of the Selawik National Wildlife Refuge and added to said refuge.

(7) The Togiak National Wildlife Refuge as herein established shall be comprised of approximately 2.74 million acres of lands, waters, and interests therein within the area generally depicted as the "Proposed Boundary" on the map entitled "Togiak National Wildlife Refuge", and dated December 1973, and the Cape Newenham National Wildlife Refuge, established by Public Land Order Numbered 4583 of January 20, 1969, is hereby redesignated as part of the Togiak National Wildlife Refuge and added to said refuge.

(8) The Yukon Delta National Wildlife Refuge as herein established shall be comprised of approximately 5.16 million acres of lands, waters, and interests therein within the area generally depicted as the "Proposed Boundary" on the map entitled "Yukon Delta National Wildlife Refuge", and dated December 1973, and the Clarence Rhode National Wildlife Refuge, established by Public Land Order Numbered 4581 of January 20, 1969, amending Public Land Order Numbered 2253 of January 23, 1961, amending Public Land Order Numbered 2213 of December 8, 1960, issued pursuant to Executive Order Numbered 10355, is hereby redesignated as a unit of the Yukon Delta National Wildlife Refuge to be administered as part of said refuge, and the Hazen Bay National Wildlife Refuge, as established by

1 Proclamation Numbered 2416 of July 15, 1946, amending
2 Executive Order Numbered 7770 of December 14, 1937, is
3 hereby redesignated as part of the Yukon Delta National
4 Wildlife Refuge and added to said refuge.

5 (9) The Yukon Flats National Wildlife Refuge as here-
6 in established shall be comprised of approximately 3.59
7 million acres of lands, waters, and interests therein within
8 the area generally depicted as the "Proposed Boundary" on
9 the map entitled "Yukon Flats National Wildlife Refuge",
10 and dated December 1973.

11 (b) The Secretary of the Interior (hereinafter referred
12 to as "the Secretary") may make minor revisions in the
13 boundary of each refuge and each range by publication of a
14 revised map or other boundary description in the Federal
15 Register.

16 PART B—GENERAL ADMINISTRATIVE PROVISIONS

17 ACQUISITION OF PROPERTY

18 SEC. 203. Within the boundary of each refuge and each
19 range the Secretary is authorized to acquire by purchase, do-
20 nation, or exchange, lands, waters, and interests therein, ex-
21 cept that lands, waters, and interests therein owned by the
22 State of Alaska or any political subdivision thereof may be
23 acquired only with agreement of the said State or political
24 subdivision and property owned by any Native village or

1 corporation may be acquired only with the concurrence of
2 such owner.

3 COOPERATIVE AGREEMENTS

4 SEC. 204. (a) The Secretary is authorized to cooperate
5 and seek agreements with the heads of other Federal agen-
6 cies and the owners of lands and waters within, adjacent to
7 or related to each area added to existing units or established
8 by section 202 of this title, including, without limitation, the
9 State of Alaska or any political subdivision thereof, any
10 Native corporation, village, or group having traditional cul-
11 tural or resource-based affinities for such areas. Such agree-
12 ments shall have as their purpose the assurance that resources
13 will be used, managed and developed in such a manner as to
14 be consistent with the preservation of the environmental
15 quality of such areas.

16 (b) The head of any Federal agency, other than agen-
17 cies that are parties to cooperative agreements pursuant to
18 subsection (a) of this section, having direct or indirect juris-
19 diction over a proposed Federal or federally assisted under-
20 taking in the lands and waters within, adjacent to or related
21 to areas added to existing units or established by section 202
22 of this title, and the head of any Federal department or
23 interdepartmental agency, other than parties to such agree-
24 ments, having authority to license any undertaking in such
25 lands and waters shall, prior to the approval of the expendi-

1 ture of any Federal funds on the undertaking or prior to the
2 issuance of any license, as the case may be, afford the Sec-
3 retary a reasonable opportunity to comment with regard to
4 such undertaking. Nothing in subsection (c) of this section
5 shall be construed as superceding or limiting the authorities
6 and responsibilities of the Secretary under the Fish and
7 Wildlife Coordination Act, as amended (60 Stat. 1080;
8 16 U.S.C. 661-667e).

9 (c) The Secretary may seek, with the concurrence of
10 the Secretary of State, and enter into bilateral or multilateral
11 agreements with foreign countries in order to provide for the
12 protection, preservation, and enhancement of the fish and
13 wildlife of international significance.

14 ADMINISTRATION

15 SEC. 205. (a) (1) The Secretary shall administer the
16 refuges and the ranges pursuant to the provisions of the
17 National Wildlife Refuge Administration Act of 1966, as
18 amended (80 Stat. 927; 16 U.S.C. 668dd-668ee), and the
19 provisions of this title, as part of the National Wildlife
20 Refuge System. The Secretary may also utilize such addi-
21 tional authorities as may be available to him for the manage-
22 ment and protection of the resources within, adjacent to or
23 related to the refuges and the ranges, including but not
24 limited to the preservation and enhancement of nationally
25 and internationally significant fish and wildlife species, the

1 development of fish and wildlife-oriented outdoor recreation
2 opportunities, interpretive education programs and scientific
3 research, the conservation, protection, restoration, and propa-
4 gation of endangered and threatened species, and the preser-
5 vation of cultural, historical, and archeological resources.

6 (2) The Illiamna National Resource Range shall be
7 administered as a unit of the National Wildlife Refuge Sys-
8 tem pursuant to paragraph (1) of this subsection and in
9 accordance with plans, to be developed by the Secretary,
10 which will permit activities, in accordance with the principles
11 of multiple use and sustained yield, which the Secretary
12 determines will not significantly impair the nationally and
13 internationally significant fish and wildlife resources of the
14 range and Bristol Bay.

15 (3) The Noatak National Arctic Range shall be ad-
16 ministered as a unit of the National Wildlife Refuge System
17 pursuant to paragraph (1) of this subsection and in accord-
18 ance with plans, to be developed by the Secretary, which
19 will provide for the protection of the natural features of the
20 range, permit appropriate scientific research and other ac-
21 tivities which will not significantly impair the environment.
22 For a period of twenty years following the enactment of this
23 title, any developmental activities or uses are, subject to valid
24 existing rights, prohibited on the range. The Secretary shall
25 conduct a review and report to the Congress within twenty

1 years of the date of enactment of this title his findings and
2 recommendations for the future administration and manage-
3 ment of the range.

4 (b) (1) The lands within the refuges and the Iliamna
5 National Resource Range are, subject to valid existing rights,
6 hereby withdrawn from location, entry, and patent under
7 the public land laws of the United States, including all forms
8 of appropriation under the United States mining laws, but
9 not including the Mineral Leasing Act of February 25, 1920,
10 as amended and supplemented (30 U.S.C. 181-263), ex-
11 cept that, with respect to mineral deposits normally subject
12 to location, entry, and patent pursuant to the mining laws,
13 the Secretary may issue permits for the exploration and
14 development of said deposits pursuant to regulations estab-
15 lishing procedures, terms, and conditions under which such
16 activity may be conducted, but with right of occupation and
17 use of only so much of the surface of the land as is immedi-
18 ately and directly necessary to the exploration and develop-
19 ment of said deposits. Any mining claims located under the
20 mining laws of the United States within the boundaries of
21 those areas withdrawn pursuant to this subsection, must be
22 recorded with the Secretary under regulations established by
23 the Secretary within one year after the effective date of such
24 regulations. Any mining claim not so recorded shall be con-
25 clusively presumed to be abandoned and shall be void. Such

1 recordation will not render valid any claim which was not
2 valid on the effective date of this title, or which becomes in-
3 valid thereafter. Any claim recorded pursuant to the regula-
4 tions promulgated under this subsection, for which the claim-
5 ant has not made application for a patent within three years
6 from the date of recordation, shall be presumed to be in-
7 valid unless the claimant presents to the Secretary clear
8 evidence of its validity.

9 (2) The Secretary may administratively cancel any
10 lease or prospecting permit for violations of the terms of the
11 lease or permit or of regulations issued pursuant to the Min-
12 eral Leasing Act of February 25, 1920, without regard to
13 the requirements of section 31 of such Act (30 U.S.C. 188),
14 after thirty days' notice to the lessee or permittee and failure
15 of the lessee or permittee to correct the condition giving rise
16 to the breach.

17 (c) The lands within the Noatak National Arctic Range
18 are, subject to valid existing rights, withdrawn from loca-
19 tion, entry, and patent under the public land laws of the
20 United States, including all forms of appropriation under the
21 mining laws of the United States and from the operation of
22 the Mineral Leasing Act of February 25, 1920, as amended
23 and supplemented.

24 (d) Except as may otherwise be prohibited by Federal
25 or State law, the Secretary shall permit the continuation of

1 such subsistence uses of the fish, wildlife, and plant resources
2 within the refuges and the ranges to the extent that such uses
3 were in effect on the date of enactment of the Alaska Native
4 Claims Settlement Act. Such uses shall continue unless the
5 Secretary determines that particular uses are materially and
6 negatively affecting the fish, wildlife, or plant resources of
7 the refuges and the ranges: *Provided, That*, for such rea-
8 sons as public safety, administration, fish and wildlife man-
9 agement, or public use and enjoyment, the Secretary may,
10 by regulation, prescribe conditions under which such sub-
11 sistence uses shall be conducted including, but not limited
12 to, prohibitions on taking, the establishment of limits on the
13 number and type of resources taken, and the season when
14 and area within the refuges and the ranges where subsist-
15 ence activities can be undertaken. Regulations promulgated
16 pursuant to this section shall be put into effect only after
17 consultation with the appropriate fish and game agency of
18 the State of Alaska.

19 WILDERNESS REVIEW

20 SEC. 206. (a) Within three years from the date of en-
21 actment of this title, the Secretary shall report to the Presi-
22 dent, in accordance with subsections 3 (c) and 3 (d) of the
23 Wilderness Act (78 Stat. 890; 16 U.S.C. 1132 (c) and
24 (d)), his recommendations as to the suitability or nonsuit-
25 ability of any area within the refuges and the Iliamna Na-

1 tional Resource Range for preservation as wilderness, and
2 any designation of any such areas as wilderness shall be ac-
3 complished in accordance with said subsections of the Wilder-
4 ness Act, except that this section shall not apply to that por-
5 tion of the Bering Sea National Wildlife Refuge designated as
6 wilderness pursuant to the Act of October 23, 1970 (84
7 Stat. 1104; 16 U.S.C. 1132 note). Notwithstanding any-
8 thing to the contrary in the Wilderness Act, the Secretary
9 shall, with respect to any existing refuge added to the refu-
10 ges herein established by paragraphs (1) (D), (2), and
11 (8) of section 202 (a) of this title, report to the President his
12 recommendations as to the suitability of any area within the
13 entire refuge within three years from the date of enactment
14 of this title.

15 (b) With regard to the Noatak National Arctic Range
16 such a wilderness report as is required in subsection (a) of
17 this section shall be included in the Secretary's report to the
18 Congress pursuant to section 205 (a) (3) of this title.

19 PART C—WILD AND SCENIC RIVERS

20 SEC. 207. (a) Section 3 (a) of the Wild and Scenic
21 Rivers Act (82 Stat. 907) as amended (16 U.S.C. 1274
22 (a)), is further amended by adding the following new
23 paragraphs.

24 “ . ALAGNAK, ALASKA.—The entire river within
25 the boundary of the Iliamna National Resource Range

1 from a point approximately eight miles below its source,
2 to a point twenty miles above the mouth, including the
3 Nonvianuk River, to be administered by the Secretary
4 of the Interior;

5 “ . ANDREAFSKY, ALASKA.—From its source,
6 including all headwaters, downstream for two hundred
7 and forty miles, including the East Fork, all within the
8 boundary of the Yukon Delta National Wildlife Refuge,
9 to be administered by the Secretary of the Interior;

10 “ . IVISHAK, ALASKA.—From its source, includ-
11 ing all headwaters and an unnamed tributary to Porcu-
12 pine Lake, downstream to a point near Flood Creek, all
13 within the boundary of Arctic National Wildlife Refuge,
14 to be administered by the Secretary of the Interior;

15 “ . KANEKTOK, ALASKA.—The entire river within
16 the boundary of Togiak National Wildlife Refuge,
17 Kagati Lake to a point sixteen miles above the mouth,
18 to be administered by the Secretary of the Interior;

19 “ . NOATAK, ALASKA.—From the east boundary
20 of the Noatak National Arctic Range to its confluence
21 with the Kelly River, to be administered by the Secre-
22 tary of the Interior; and

23 “ . WIND, ALASKA.—From its source, including
24 all headwaters and one unnamed tributary in Township
25 T13S, downstream for sixty-five miles, within the

1 boundaries of the Arctic National Wildlife Refuge, to be
2 administered by the Secretary of the Interior.”

3 (b) The river segments designated in subsection (a) of
4 this section are hereby classified and designated and shall be
5 administered as wild river areas.

6 (c) Notwithstanding any provisions to the contrary of
7 the Wild and Scenic Rivers Act (82 Stat. 907; 16 U.S.C.
8 1271) the boundaries of the river segments referred to in
9 subsection (a) of this section may include an area extend-
10 ing up to two miles from the mean high water level on either
11 side of the river segments. Notwithstanding the provisions
12 of section 3 (b) of such Act, the Secretary shall establish
13 boundaries for the river segments referred to in subsection
14 (a) of this section within three years after the date of en-
15 actment of this title.

16 (d) The provisions of section 6 of the Wild and Scenic
17 Rivers Act shall not apply to the river segments referred to
18 in subsection (a) of this section.

19 PART D—REGULATIONS

20 SEC. 208. (a) The Secretary may issue such rules and
21 regulations as may be necessary to carry out the provisions
22 of this title.

23 (b) Any regulations heretofore prescribed by the Sec-
24 retary for any existing refuge added to the refuges herein
25 established as referred to in paragraphs (1), (2), (6),

1 (7), and (8) of section 202 (a) of this title shall remain
2 in effect until republished in total or in part by the Secretary.

3 PART E—APPROPRIATION AUTHORIZATION

4 SEC. 209. There are hereby authorized to be appropri-
5 ated such sums as may be necessary to carry out the provi-
6 sions of this title.

7 TITLE III—NATIONAL FOREST SYSTEM

8 NEW ALASKA NATIONAL FORESTS

9 SEC. 301. For the purpose of providing for the protec-
10 tion, conservation, and management of the multiple resource
11 values of certain public lands in the State of Alaska as part
12 of the National Forest System, the areas described in subsec-
13 tions (a) through (c) of this section, as generally depicted
14 on maps appropriately referenced, dated December 1973, and
15 on file and available for public inspection in the Office of the
16 Chief, Forest Service, Department of Agriculture, are hereby
17 established as the Wrangell Mountains, Porcupine, and
18 Yukon-Kuskokwim National Forests, respectively. The
19 Wrangell Mountains, Porcupine, and Yukon-Kuskokwim
20 National Forests shall, subject to valid existing rights, be
21 administered by the Secretary of Agriculture in accordance
22 with the laws, rules, and regulations applicable to the na-
23 tional forests.

24 (a) The Porcupine National Forest shall include the
25 area generally depicted on a map entitled, "Proposed Porcu-

1 pine National Forest", comprising approximately 5.5 million
2 acres.

3 (b) The Wrangell Mountains National Forest shall
4 include the area generally depicted on a map entitled, "Pro-
5 posed Wrangell Mountains National Forest", comprising
6 approximately 5.5 million acres.

7 (c) The Yukon-Kuskokwim National Forest shall in-
8 clude the area generally depicted on a map entitled, "Pro-
9 posed Yukon-Kuskokwim National Forest", comprising ap-
10 proximately 7.3 million acres.

11 ADDITION TO CHUGACH NATIONAL FOREST

12 SEC. 302. Within sixty days following enactment of this
13 title, the Secretary of the Interior shall, by public land order,
14 provide for addition to the Chugach National Forest of the
15 area comprising approximately five hundred thousand acres
16 generally depicted on a map entitled "Proposed Chugach
17 National Forest Addition" which is on file and available for
18 public inspection in the Office of the Chief, Forest Service,
19 Department of Agriculture. Subject to valid existing rights,
20 the Chugach National Forest Addition shall be administered
21 as a part of the Chugach National Forest in accordance with
22 the laws, rules, and regulations applicable to national forests.

23 WILD AND SCENIC RIVERS WITHIN ALASKA NATIONAL
24 FORESTS

25 SEC. 303. (a) Section 3 (a) of the Wild and Scenic

1 Rivers Act (82 Stat. 907, 16 U.S.C. 1274 (a)), as amended
2 is further amended by adding the following new paragraphs:

3 “ . BREMNER, ALASKA.—The entire river, from its
4 origin to its confluence with the Copper River, to be admin-
5 istered by the Secretary of Agriculture.

6 “ . NOWITNA, ALASKA.—The segment from the point
7 where the river crosses the west boundary of section 6, town-
8 ship 17 south, range 22 east, Fairbanks principal meridian,
9 downstream to its confluence with the Yukon River, to be
10 administered by the Secretary of Agriculture.

11 “ . PORCUPINE, ALASKA.—The segment from the
12 Canadian border downstream to the point where the river
13 crosses the north boundary of section 2, township 23 north,
14 range 18 east, Fairbanks principal meridian, to be adminis-
15 tered by the Secretary of Agriculture.

16 “ . SHEENJEK, ALASKA.—The segment from the point
17 where the river crosses the north boundary of section 1,
18 township 32 north, range 16 east, Fairbanks principal me-
19 ridian, downstream to its confluence with the Porcupine
20 River, to be administered by the Secretary of Agriculture.”

21 (b) The Bremner and Sheenjek River segments desig-
22 nated in subsection (a) of this section are hereby classified
23 and designated and shall be administered as wild river areas.
24 The Porcupine and Nowitna River segments designated in

1 subsection (a) of this section are hereby classified and desig-
2 nated and shall be administered as scenic river areas.

3 (c) Notwithstanding the provisions of subsection 3 (b)
4 of the Wild and Scenic Rivers Act (82 Stat. 907, 16 U.S.C.
5 1274 (b)), the Secretary of Agriculture shall establish
6 boundaries for the Wild and Scenic Rivers referred to in sec-
7 tion 303 of this title within three years after the date of
8 enactment of this title.

9 SEC. 304. The Secretary of Agriculture shall, as soon as
10 practicable after the date of enactment of this title, publish
11 in the Federal Register a detailed description and map show-
12 ing the boundaries of the Wrangell Mountains, Porcupine,
13 and Yukon-Kuskokwim National Forests, and the addition
14 to the Chugach National Forest.

15 SEC. 305. There are hereby authorized to be appropri-
16 ated such sums as may be necessary to carry out the provi-
17 sions of this title.

18 TITLE IV—ADDITIONS TO NATIONAL WILD AND
19 SCENIC RIVERS SYSTEM LOCATED OUTSIDE
20 NATIONAL PARKS, NATIONAL WILDLIFE
21 REFUGES, AND NATIONAL FORESTS

22 DESIGNATION

23 SEC. 401. Section 3 (a) of the Wild and Scenic Rivers
24 Act (82 Stat. 907), as amended (16 U.S.C. 1274 (a)),

25 is further amended by adding the following new paragraphs:

1 “ . BEAVER CREEK, ALASKA.—The segment of the
2 main stem from the vicinity of the confluence of Bear and
3 Champion Creeks downstream one hundred and thirty-five
4 miles to a point approximately fifteen miles downstream
5 from the mouth of Victoria Creek, the segment not to ex-
6 ceed two hundred thousand acres; to be administered by the
7 Secretary of the Interior.

8 “ . BIRCH CREEK, ALASKA.—The segment of the main
9 stem from the vicinity of the confluence of North Fork
10 downstream one hundred and thirty-five miles to the vicinity
11 of Jumpoff Creek, the segment not to exceed two hundred
12 thousand acres; to be administered by the Secretary of the
13 Interior.

14 “ . FORTY MILE, ALASKA.—The main stem within the
15 State of Alaska; O'Brien Creek; South Fork; Napoleon
16 Creek; Franklin Creek; Uhler Creek, Walker Fork down-
17 stream from the confluence of Liberty Creek; Wade Creek;
18 Mosquito Fork downstream from the vicinity of Kechum-
19 stuk; West Fork Dennison Fork downstream from the con-
20 fluence of Logging Cabin Creek; Dennison Fork downstream
21 from the confluence of West Fork Dennison Fork; Logging
22 Cabin Creek; North Fork; Hutchinson Creek; Champion
23 Creek; the Middle Fork downstream from the confluence
24 of Joseph Creek; and Joseph Creek, the segments not to

1 exceed three hundred and twenty thousand acres; to be ad-
2 ministered by the Secretary of the Interior.

3 " . UNALAKLEET, ALASKA.—The segment of the main
4 stem beginning at 159 degrees 21 minutes 06.156 seconds
5 west longitude approximately six miles from the headwaters
6 extending downstream sixty miles to 160 degrees 19 min-
7 utes 15.031 seconds west longitude in the vicinity of con-
8 fluence of the Chirokey River, the segment not to exceed
9 one hundred and four thousand acres; to be administered
10 by the Secretary of the Interior."

11 ADMINISTRATIVE PROVISIONS

12 SEC. 402. (a) The Beaver Creek, Birch Creek, and
13 Unalakleet components, as well as Mosquito Fork down-
14 stream from the vicinity of Kechumstuk to Ingle Creek,
15 North Fork, Champion Creek, Middle Fork downstream
16 from the confluence of Joseph Creek, and Joseph Creek
17 units of the Fortymile component, designated in section 401
18 of this title, are hereby classified and designated and shall
19 be administered as wild river areas pursuant to the Wild and
20 Scenic Rivers Act. The Wade Creek unit of the Fortymile
21 component is classified and designated and shall be admin-
22 istered as a recreational river area, pursuant to such Act.
23 The remaining units of the Fortymile component are classi-
24 fied and designated and shall be administered as scenic river
25 areas, pursuant to such Act. The classification as wild river

1 areas of certain segments of the Fortymile by this subsection
2 shall not preclude such access across those river segments
3 as the Secretary of the Interior determines to be necessary
4 to permit commercial development of asbestos deposits in the
5 North Fork drainage.

6 (b) The Secretary of the Interior shall take such action
7 as is provided for under section 3 (b) of the Wild and Scenic
8 Rivers Act to establish detailed boundaries and formulate
9 detailed development and management plans within three
10 years after the date of enactment of this title with respect
11 to the Beaver Creek component, within two years with
12 respect to the Birch Creek component, within one year with
13 respect to the Fortymile component, and within four years
14 with respect to the Unalakleet component.

15 (c) The provisions of section 401 of this title specify-
16 ing maximum permissible acreages for individual components
17 shall supersede any provisions to the contrary of the Wild
18 and Scenic Rivers Act.

19 (d) Notwithstanding the provisions of section 9 (a) (iii)
20 of the Wild and Scenic Rivers Act, the minerals in all Fed-
21 eral lands included in any component or part of a component
22 designated by this section as a wild river area are hereby
23 withdrawn, subject to valid existing rights, from all forms of
24 appropriation under the mining laws and from operation of

A BILL

To provide for the addition of certain lands in the State of Alaska to the National Park, National Wildlife Refuge, National Forest, and the Wild and Scenic Rivers Systems, and for other purposes.

By Mr. JACOBSON and Mr. FANNIN

JANUARY 30, 1974

Read twice and referred to the Committee on Interior
and Insular Affairs

INT: 4737-74

1 the mineral leasing laws including, in both cases, amend-
2 ments thereto.

3 APPROPRIATION AUTHORIZATION

4 SEC. 403. There is hereby authorized to be appropriated
5 such sums as may be necessary for the purposes of this title.

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